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 Ala Pro Glu Arg Leu Asp Glu Gly Leu Lys Arg Leu Ala Ala Val Ile
 35 40 45
 Arg His Ala Gln Ala Ala Gln Ala Ala
 50 55

<210> 1053
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 1053
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 120
 gcgtgcctgg gaacgcgacc tgctcgagcg ttatctgtgg cgcctcgccg aagaggggtg
 180
 cgccaacccg cctcgttgc agcaagcgtg gctacgctac cggcaacagc cgttccacgt
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 318

<210> 1054
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1054
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 20 25 30
 Ala Trp Glu Arg Asp Leu Leu Glu Arg Tyr Leu Trp Arg Leu Ala Glu
 35 40 45
 Glu Gly Val Ala Asn Pro Pro Ser Phe Glu Gln Ala Trp Leu Arg Tyr
 50 55 60
 Arg Gln Gln Pro Phe His Val Gly Ile Phe Ser Leu Leu Thr Ile Gly
 65 70 75 80
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 85 90 95

<210> 1055
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1055
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 120

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 180
 aggggaccag gcctgatgaa caccatcctg ggcccagaaa cctgggaggg taaagagaac
 240
 tgccaggggt gaagtccaag gatgggaaaa aggcctccgg ggcagagtc ctaaagtgtca
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<210> 1056

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1056

Met	Val	Ser	Pro	Leu	His	Cys	Ser	Leu	Gly	Asn	Arg	Met	Arg	Pro	Cys
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Leu	Ser	Asn	Asn	Val	Met	Leu	Phe	Pro	Leu	Trp	Cys	Thr	Ser	Asp	Ile
		20						25					30		
Ser	Gly	Leu	Cys	Pro	Gly	Gly	Leu	Phe	Pro	Ile	Leu	Gly	Leu	His	Pro
		35					40					45			
Trp	Gln	Phe	Ser	Leu	Pro	Ser	Gln	Val	Ser	Gly	Pro	Arg	Met	Val	Phe
	50					55					60				
Ile	Arg	Pro	Gly	Pro	Leu	Arg	Ser	Ala	Glu	Arg	Gln	Met	Pro	Leu	Ala
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Pro	Gly	Ala													

<210> 1057

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1057

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 240
 atcgctttg cgcattctgcg cgcgaccaag cgcgacgcg atggcctgtc gtttcatgaa
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<210> 1058

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
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 20 25 30
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
 35 40 45
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
 50 55 60
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
 65 70 75 80
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
 85 90 95
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
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 Cys

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

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 120
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 180
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccg
 240
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 360
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 372

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

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 20 25 30
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
 35 40 45
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
 50 55 60
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

1002

<210> 1063
<211> 3760
<212> DNA
<213> Homo sapiens

<400> 1063
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120
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180
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240
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360
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420
gagagagaga gtgacagga gagagagaca gagcggggaa ggagagaatg agaaggaaaa
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540
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720
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1140
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1440

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2160
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3060

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 3240
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Ser	Ala	Val	Lys	Ser	Arg	
			20					25				30			
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe
		35				40					45				
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50					55					60				
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65					70					75				80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100						105				110			
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115					120					125			
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130					135					140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150						155				160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165					170					175		
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<210> 1065
<211> 892
<212> DNA
<213> Homo sapiens
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1006

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 360
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 420
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 480
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 gccctttgta ggagggggcat cacaggctgg ctcacctcag cagtgccagg cagagccctg
 720
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<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
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Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20					25					30		
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
		35					40				45				
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
	50					55					60				
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc
 240

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 300
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 418

<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

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Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
		20					25					30			
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
	35					40					45				
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
	50				55				60						
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65				70					75				80		
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
			85					90					95		
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
		100						105					110		
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
		115				120						125			
Asp	Ser	Leu	Gln	Gln	Val	Ile	Asn	Thr	Tyr	Ala					
	130					135									

<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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 120
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 180
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 240
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 360
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 371

<210> 1070

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1070
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 Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
 35 40 45
 Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
 50 55 60
 Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
 65 70 75 80
 Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
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 His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
 100 105 110
 Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
 115 120

<210> 1071
 <211> 998
 <212> DNA
 <213> Homo sapiens

<400> 1071
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 180
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 240
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 420
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 720
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 780

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<210> 1072

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1072

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Arg	Ile	Ala	Gly	Gln	Ile	Gln	Ala	Val	Glu	Arg	Ala	Leu	Glu	Ser	Asp
		20				25						30			
Ala	Asp	Cys	Ala	Lys	Thr	Leu	His	Leu	Val	Ala	Ala	Thr	Arg	Gly	Ala
		35				40						45			
Ile	Asn	Gly	Leu	Met	Asp	Glu	Ile	Ile	Glu	Asp	His	Ala	Arg	Lys	His
	50					55					60				
Val	Ala	Ser	Pro	Thr	Leu	Ser	Asp								
65					70										

<210> 1073

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1073

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240
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300
catcctctgt ataatatgtt gttttcacct ctttatgaac tcttttgat tctcattact
360
ggctctggaa cccagaacat accacggggt caaggatatgt tttaatgaat tgaatggaat
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468

<210> 1074

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1074

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Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
 1           5           10           15
Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
          20           25           30
Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
          35           40           45
Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
          50           55           60
Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
65           70           75           80
Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
          85           90           95
Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
          100          105          110
Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
          115          120          125
Met Pro Leu Asn Thr Asp
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<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

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120
gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
180
ggctgtgggt gtgaagtccg tccagagggg cttgctggct gaggtggctg gcctgcaggt
240
ggggaggaag atctactcca tcaatgagga cctggtgttc ctgcggccgt tttcagaggt
300
ggagtcctc ctcaaccagt ctttctgtc ccgcccct ctgcgcctcc tggtagccac
360
gaaggccaaa gagatcatca aaatccccga ccagccggac aactgtgct tccagattcg
420
tggagctgcc ccaccgtacg tctatgctgt ggggagaggg tctgaggcca tggtgcagg
480
gctctgtgct ggtagtgca ttctgaaggt caatggcagc aacgtgatga acgatgggtc
540
ccctgaggtc ctggagcact tccaggcatt ccggagtcgg cgcgaagagg ccctgggcct
600
gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
660
ctccactgag gaccccgatg gcgagcaggg ccaggaggaa gaccaggctg attcagcctt
720
cccactgtg tccctgggtc cccggctgag cctgtgtgag ggcagcccca tggtcaccct
780
gactgtggac aacgtgcacc tggaacacgg cgtggtgtat gagtatgtga gcacggcagg
840

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cgtcagggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcacccg
 900
 caagatcctc gaggcctttg ctgccaatga cagcgtcttc gtggagaact gcaggcggt
 960
 catggccctg agcagcgcca tcgtgacat gccccacttt gagttccgca acatctgtga
 1020
 caccaagctg gagagcattg gccagaggat tgctgtctac caggagtttg cagcccaact
 1080
 gaagagcagg gtcagccac ccttcaaaca agccccctg gagccccacc cgctgtgtgg
 1140
 cctacttctg cccaccaat tgccacatca acctcatgga agtgtcctac cccaagacca
 1200
 cccctcagt gggcaggctc ttcagcatcc gctttggacg caaacctcc ctcatcgcc
 1260
 ttgaccggga gcaaggccac ctgaaccca tgcgtacac ccagcactgc atcaccacca
 1320
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 1380
 tccatgatgg cagcttcggg ccagccagt ggacccttg tcaggaagac cggggcctca
 1440
 gcttctact caagcaggag gaccgtgaga tccaggatgc ctacctgag ctcttcacca
 1500
 agctggatgt ggccctgaag gagatgaagc aatatgtcac ccagatcaac aggctgctgt
 1560
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 1620
 cctccctgcc cct
 1633

<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

His	Gln	Ala	Gly	Glu	His	Trp	Pro	Glu	Asp	Cys	Leu	Leu	Pro	Gly	Val
1				5					10					15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
			20					25					30		
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35					40				45				
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50					55					60				
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65					70				75					80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
				85											

<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

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 120
 caccagagt ttacatatcc aatttttgga gaggtgagg caatttacgg ctacaacggc
 180
 ttgcacatga atcttgctt tgcgagcggc agcctggtgc cgctgctcga aatcacttac
 240
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga
 300
 gtgctccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc
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 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
1				5					10					15	
Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
			35					40					45		
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
			50					55				60			
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
					70					75				80	
Arg	Ala	Lys	Asn	Thr	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln
					85					90				95	
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
				100					105					110	
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
				115				120						125	
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
				130					135						

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 60
 agccttgga aatgtacccc catgctgtgg catctacaat cggcctcctg ttcttactct
 120
 gctcaaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag
 180
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta
 240

ttaccacca gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact
 300
 gtgtcttctg caaagacaca catctgtttc actggggttt tctgcaaaga caccatttg
 360
 ttccccctt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt
 420
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg ccgacttgac
 480
 cacagcacct tgttctttc tgtaatctag acatttctgc acaatagagg gccaccacct
 540
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 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
1				5					10					15	
Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20					25					30		
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
			35				40					45			
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
	50				55					60					
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65				70						75				80	
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
			85					90					95		
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
			100				105					110			
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
		115					120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctctgt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggagggtcac ctgcacgtcc cactggagaa
 240
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagettcca gactcaccta
 300
 aaaactcatc tcgacactgt gcttccaaaa ttgacctgtc ctcaagtcaa caaggaattc
 360

cccaaccaag aatccttgct gaagcatggt accattcact ttatgatcac ttcaacgtat
420
tacatctgtg agagttgtga caagcaattc acatcagtgg atgaccttca gaaacacctg
480
ctggacatgc acacctttgt cttctttcgc tgcaccctct gccaggaagt ttttgactca
540
aaagtctcca ttcagctcca cttggctgtg aagcacagta acgaaaagaa agtctatagg
600
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac
660
aaccacctgg aaaaccaagg gaaagtgc atgtgcattt tctgcggtga gtcttttggc
720
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc
780
tgtagcaaag ccttccatgc gatcattttg ttagaaaaac acttgcgaga aaaacactgt
840
gtattcgaaa ccaagacacc caactgtgga acaaatggag cttccgagca agtgcagaaa
900 agctgcagac ttgtctgacc aacagccagg agtcccacaa cagtccagat 960
gggagcgaag aagacgttga cacctctgag cctatgtacg gctgcgacat ttgtggggca
1020
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct
1080
ggagaaagtg ccatcgtgaa aaagaaagct gagctcatta aagggaatta caagtgcagc
1140
gtgtgtcttc gaaccttctt ctccgaaaat ggcttccggg aacatatgca gacccaccta
1200
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1260
cttactgaac acaagtcac gcatagtaag agtcttgata ctggaaactg ccggatttgc
1320
aagatgcctc tccagagtga agaggagttt ttagagcatt gccaaatgca cctgacttg
1380
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1440
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1560
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1680
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1740
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1800
aaccacatcc aaaccatcca ccgagagctc gtgccagaca gcaacagcac acagttgaaa
1860
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1920
tatcaatgca tcaagtgtca gatggttttc tacaatgaat gggatattca ggttcatgtt
1980
gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt
2040

gactctcctg ccaaactcca gtgccacctg atagagcaca gcttcgaagg gatgggaggg
 2100
 accttcaagt gtccagtctg ctttacagta tttgttcaag caaacaagtt gcagcagcat
 2160
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 2220
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 2280
 tacagtctct caaggagaat tgattttgtg gcacaaaaag ggaacatggt ttactctttg
 2340
 caggaactt tcattgttaa tgtatattat tcagaaacat tgtattgtac cataaaactt
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 2460
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 2520
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 2580
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 2640
 tggttggact tccttttctt tacacttaag cctagaattt ctctttaggt atatcagcgc
 2700
 ttaaattcaa gactattttt tattgctgaa gattcttgca aaccatgaag agatgttctc
 2760
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 2820
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 2880
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 2940
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 3060
 aggaaaaaaaa aaaaaaa
 3077

<210> 1082

<211> 757

<212> PRT

<213> Homo sapiens

<400> 1082

Xaa	Pro	Val	Val	Glu	Val	Tyr	Ser	Cys	Ser	Tyr	Cys	Thr	Asn	Ser	Pro
1				5					10					15	
Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
			20					25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
			35					40					45		
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
			50					55					60		
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70					75				80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

1017

515	520	525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val		
530	535	540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr		
545	550	555
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu		
565	570	575
Arg Gln Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys		
580	585	590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg		
595	600	605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val		
610	615	620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr		
625	630	635
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile		
645	650	655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu		
660	665	670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys		
675	680	685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys		
690	695	700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His		
705	710	715
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln		
725	730	735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met		
740	745	750
Thr Gln His Ser Ser		
755		

<210> 1083

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1083

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naccggtgag gcattctctgc aggggtgtccg gctagctaag cagagcggct ggaaggctcc
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agatccgaat aacctgcccg ctcccgtctga gcccggtggaa gaggagaaga agtgaccgat
120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
180
tacgagcgac agggcggata caccggcctt cgtaaggctt tgacgatgcc gctgacgac
240
gttgtctcgc tggtaagga cgctaacctg cgtggccgtg gtggcgccgg gttccccacc
300
ggcatgaagt ggtccttcgt gctaaggac aatcccaacc cgacctacct cgttgtcaac
360
ggcgacgagt ctgagccggg cacgtgcaag gacatgccgc tcatgatggc ctccccgcac
420
accctcgctg agggcgctcat cattgcctcc tacgcatca aggccaagat ggccttcac
480

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tacatccgcg gtgaggtgct gcacgtcgtc cgacgc
516

<210> 1084

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1084

Ala	Arg	Gly	Arg	Gly	Glu	Glu	Val	Thr	Asp	Pro	Leu	Thr	Pro	Val	Leu
1				5				10						15	
Ser	Ala	Asn	Trp	Asp	Glu	Glu	Arg	Ser	Trp	Lys	Leu	Leu	Asn	Tyr	Glu
			20					25					30		
Arg	Gln	Gly	Gly	Tyr	Thr	Gly	Leu	Arg	Lys	Ala	Leu	Thr	Met	Pro	Pro
		35				40						45			
Asp	Asp	Val	Val	Ser	Leu	Val	Lys	Asp	Ala	Asn	Leu	Arg	Gly	Arg	Gly
	50					55					60				
Gly	Ala	Gly	Phe	Pro	Thr	Gly	Met	Lys	Trp	Ser	Phe	Val	Pro	Lys	Asp
65					70					75				80	
Asn	Pro	Asn	Pro	Thr	Tyr	Leu	Val	Val	Asn	Gly	Asp	Glu	Ser	Glu	Pro
				85				90						95	
Gly	Thr	Cys	Lys	Asp	Met	Pro	Leu	Met	Met	Ala	Ser	Pro	His	Thr	Leu
			100					105					110		
Val	Glu	Gly	Val	Ile	Ile	Ala	Ser	Tyr	Ala	Ile	Lys	Ala	Lys	Met	Ala
		115					120					125			
Phe	Ile	Tyr	Ile	Arg	Gly	Glu	Val	Leu	His	Val	Val	Arg	Arg		
	130					135						140			

<210> 1085

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1085

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120
atateccacaa gggttcagtc cgccaggaga ctgtcgccga tcattttcag gaagttttct
180
ttgctgcggt cgtagtcttg gtgcaggtcg aagctgtagt cgcttttgta gatgtcccgg
240
tagaagaact cgggcagggt gcctttcatg gcttccagga tgacggggtt gtcaccccg
300
tgcccgtca gaacaccgg gtacaccagg gaagagcgga tcatgtcgtc ctcaaggtag
360
ggggcgggga attc
374

<210> 1086

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1086

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Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
 1             5             10             15
Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
             20             25             30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
             35             40             45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
             50             55             60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
             65             70             75             80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
             85             90             95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
             100             105             110

```

<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
180
tcgttctact tetacaacac tttcccgga gtggatgcgt tagcgtcggc ggtgcggggc
240
gcccggaat ttttcggagt gcattaggat tggctctgaac gtgaaccttg aatccatgta
300
ccaggaagtc atcctggacc actacaagaa tcccacgcac gcagggttga aggtccctt
360
tgatgccgaa gtgcaccatg tgaacccttc ctgcggtgac ganaccgtct ccgggtgaag
420
ctt
423

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<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

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Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
 1             5             10             15
Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
             20             25             30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
             35             40             45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
             50             55             60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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85
Lys Leu Ala Trp Glu Asn Thr
100

90

95

<210> 1091
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1091
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300
cgtttaaccg agtcggatta taatatatta cggaaacaac ccattcgctt ggcagataaa
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gactttgatc gctgcatg
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<210> 1092
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1092
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Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu
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Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln
35 40 45
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
50 55 60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
65 70 75 80
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
85 90 95
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
100 105 110
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
115 120 125
Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg
130 135 140
Cys Met
145

<210> 1093
 <211> 351
 <212> DNA
 <213> Homo sapiens

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 180
 gagattggcc gtctgctga acaaattccg caaaccaact ccgaaaccaa gatcaagaag
 240
 ctgtccaagc gtctgaagtt gatggaagcc ttccagggtt ccggcaactt gccagagtgg
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<210> 1094
 <211> 117
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg
 50 55 60
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys
 65 70 75 80
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn
 85 90 95
 Leu Pro Glu Trp Met Val Leu Thr Val Leu Pro Val Leu Pro Pro Asp
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<210> 1095
 <211> 619
 <212> DNA
 <213> Homo sapiens

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 120
 agccagcggc agatccgagg ggagatcgac agcctgcgcc aggagaagga ctcaactgctc
 180

aagcagcgcc tggagatcga cggcaagctg aggcagggga gtctgctgtc ccccgaggag
 240
 gagcggacgc tgttccagtt ggatgaggcc atcgaggccc tggatgctgc cattgagtat
 300
 aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgctgtcc
 360
 cagtgcgaga tgaacctcat ggccaagctc agctacctct catcctcaga gaccagagcc
 420
 ctctctgca agtattttga caagggtgggc cagcagccca tggccccccc agctcctcct
 480
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 619

<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

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Ser	Ser	Arg	Leu	Glu	His	Leu	Glu	Lys	Glu	Leu	Ser	Glu	Lys	Ser	Gly
			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
			35				40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
			50				55				60				
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Leu	Ser	Pro	Glu	Glu
65						70				75				80	
Glu	Arg	Thr	Leu	Phe	Gln	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Leu	Asp	Ala
				85					90					95	
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
			100					105					110		
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
			115				120					125			
Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
			130				135					140			
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145					150					155				160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
				165					170					175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
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Arg	Ala	Ala													
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<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

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gacaaagagt tcacttccca tgagatcaaa caccctcaca gttcctgtgc tttcggcata
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420
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480
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600
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720
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780
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1020
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1080
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1260
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1320
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<210> 1098

<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

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Lys	His	Gly	Leu	Glu	Lys	Pro	Ile	Ser	Phe	Val	Lys	Asn	Thr	Gln	Ser
			20					25				30			
Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
		35					40				45				
Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
	50					55				60					
Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
65				70					75					80	
Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
			85					90				95			
Leu	Glu	Asn	Ile	His	Leu	Ala	Gly	Gln	Met	Met	His	Cys	Ser	Ala	Cys
		100					105					110			
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
	115					120					125				
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
	130				135					140					
Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
145				150					155					160	
Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
			165					170					175		
Glu	Glu	Leu	Asp	Leu	Ile	Gln	Ala	Val	Gly	Cys	Leu	Glu	Glu	Phe	Gly
		180					185					190			
Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
	195					200					205				
Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
	210				215					220					
Thr	Lys	Leu	Leu	Gly	Leu	Ala	Glu	Leu	Leu	Arg	Val	Ala	Gly	Glu	Asn
225				230					235					240	
Pro	Glu	Glu	Arg	Arg	Gly	Gln	Val	Leu	Ile	Leu	Leu	Val	Glu	Gln	Ala
			245					250					255		
Leu	Arg	Phe	His	Asp	Tyr	Lys	Ala	Ala	Ser	Met	His	Cys	Gln	Glu	Leu
		260					265				270				
Met	Ala	Thr	Gly	Tyr	Pro	Lys	Ser	Trp	Asp	Val	Cys	Ser	Gln	Leu	Gly

275	280	285
Gln Ser Glu Gly Tyr Gln Asp Leu Ala Thr Arg Gln Glu Leu Met Ala		
290	295	300
Phe Ala Leu Thr His Cys Pro Pro Ser Ser Ile Glu Leu Leu Leu Ala		
305	310	315
Ala Ser Ser Ser Leu Gln Thr Glu Ile Leu Tyr Gln Arg Val Asn Phe		320
	325	330
Gln Ile His His Glu Gly Gly Glu Asn Ile Ser Ala Ser Pro Leu Thr		335
	340	345
Ser Lys Ala Val Gln Glu Asp Glu Val Gly Val Pro Gly Ser Asn Ser		350
	355	360
Ala Asp Leu Leu Arg Trp Thr Thr Ala Thr Thr Met Lys Val Leu Ser		365
	370	375
Asn Thr Thr Thr Thr Thr Lys Ala Val Leu Gln Ala Val Ser Asp Gly		380
385	390	395
Gln Trp Trp Lys Lys Ser Leu Thr Tyr Leu Arg Pro Leu Gln Gly Gln		400
	405	410
Lys Cys Gly Gly Ala Tyr Gln Ile Gly Thr Thr Ala Asn Glu Asp Leu		415
	420	425
Glu Lys Gln Gly Cys His Pro Phe Tyr Glu Ser Val Ile Ser Asn Pro		430
	435	440
Phe Val Ala Glu Ser Glu Gly Thr Tyr Asp Thr Tyr Gln His Val Pro		445
	450	455
Val Glu Ser Phe Ala Glu Val Leu Leu Arg Thr Gly Lys Leu Ala Glu		460
465	470	475
Ala Lys Asn Lys Gly Glu Val Phe Pro Thr Thr Glu Val Leu Leu Gln		480
	485	490
Leu Ala Ser Glu Ala Leu Pro Asn Asp Met Thr Leu Ala Leu Ala Tyr		495
	500	505
Leu Leu Ala Leu Pro Gln Val Leu Asp Ala Asn Arg Cys Phe Glu Lys		510
	515	520
Gln Ser Pro Ser Ala Leu Ser Leu Gln Leu Ala Ala Tyr Tyr Tyr Ser		525
	530	535
Leu Gln Ile Tyr Ala Arg Leu Ala Pro Cys Phe Arg Asp Lys Cys His		540
545	550	555
Pro Leu Tyr Arg Ala Asp Pro Lys Glu Leu Ile Lys Met Val Thr Arg		560
	565	570
His Val Thr Arg His Glu His Glu Ala Trp Pro Glu Asp Leu Ile Ser		575
	580	585
Leu Thr Lys Gln Leu His Cys Tyr Asn Glu Arg Leu Leu Asp Phe Thr		590
	595	600
Gln Ala Gln Ile Leu Gln Gly Leu Arg Lys Gly Val Asp Val Gln Arg		605
	610	615
Phe Thr Ala Asp Asp Gln Tyr Lys Arg Glu Thr Ile Leu Gly Leu Ala		620
625	630	635
Glu Thr Leu Glu Glu Ser Val Tyr Ser Ile Ala Ile Ser Leu Ala Gln		640
	645	650
Arg Tyr Ser Val Ser Arg Trp Glu Val Phe Met Thr His Leu Glu Phe		655
	660	665
Pro Phe Thr Asp Ser Gly Leu Ser Thr Leu Glu Ile Glu Asn Arg Ala		670
	675	680
Gln Asp Leu His Leu Phe Glu Thr Leu Lys Thr Asp Pro Glu Ala Phe		685
	690	700
His Gln His Met Val Lys Tyr Ile Tyr Pro Thr Ile Gly Gly Phe Asp		

705					710					715				720
His	Glu	Arg	Leu	Gln	Tyr	Tyr	Phe	Thr	Leu	Leu	Glu	Asn	Cys	Gly Cys
				725					730					735
Ala	Asp	Leu	Gly	Asn	Cys	Ala	Ile	Lys	Pro	Glu	Thr	His	Ile	Arg Leu
			740					745					750	
Leu	Lys	Lys	Phe	Lys	Val	Val	Ala	Ser	Gly	Leu	Asn	Tyr	Lys	Lys Leu
		755					760					765		
Thr	Asp	Glu	Asn	Met	Ser	Pro	Leu	Glu	Ala	Leu	Glu	Pro	Val	Leu Ser
	770					775					780			
Ser	Gln	Asn	Ile	Leu	Ser	Ile	Ser	Lys	Leu	Val	Pro	Lys	Ile	Pro Glu
785				790					795					800
Lys	Asp	Gly	Gln	Met	Leu	Ser	Pro	Ser	Ser	Leu	Tyr	Thr	Ile	Trp Leu
			805					810						815
Gln	Lys	Leu	Phe	Trp	Thr	Gly	Asp	Pro	His	Leu	Ile	Lys	Gln	Val Pro
			820					825					830	
Gly	Ser	Ser	Pro	Glu	Trp	Leu	His	Ala	Tyr	Asp	Val	Cys	Met	Lys Tyr
		835					840					845		
Phe	Asp	Arg	Leu	His	Pro	Gly	Asp	Leu	Ile	Thr	Val	Val	Asp	Ala Val
850						855				860				
Thr	Phe	Ser	Pro	Lys	Ala	Val	Thr	Lys	Leu	Ser	Val	Glu	Ala	Arg Lys
865					870				875					880
Glu	Met	Thr	Arg	Lys	Ala	Ile	Lys	Thr	Val	Lys	His	Phe	Ile	Glu Lys
				885					890					895
Pro	Arg	Lys	Arg	Asn	Ser	Glu	Asp	Glu	Ala	Gln	Glu	Ala	Lys	Asp Ser
		900						905					910	
Lys	Val	Thr	Tyr	Ala	Asp	Thr	Leu	Asn	His	Leu	Glu	Lys	Ser	Leu Ala
	915						920					925		
His	Leu	Glu	Thr	Leu	Ser	His	Ser	Phe	Ile	Leu	Ser	Leu	Lys	Asn Ser
930						935				940				
Glu	Gln	Glu	Thr	Leu	Gln	Lys	Tyr	Ser	His	Leu	Tyr	Asp	Leu	Ser Arg
945					950					955				960
Ser	Glu	Lys	Glu	Lys	Leu	His	Asp	Glu	Ala	Val	Ala	Ile	Cys	Leu Asp
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Gly	Gln	Pro	Leu	Ala	Met	Ile	Gln	Gln	Leu	Leu	Glu	Val	Ala	Val Gly
		980						985					990	
Pro	Leu	Asp	Ile	Ser	Pro	Lys	Asp	Ile	Val	Gln	Ser	Ala	Ile	Met Lys
	995						1000					1005		
Ile	Ile	Ser	Ala	Leu	Ser	Gly	Gly	Ser	Ala	Asp	Leu	Gly	Gly	Pro Arg
1010						1015				1020				
Asp	Pro	Leu	Lys	Val	Leu	Glu	Gly	Val	Val	Ala	Ala	Val	His	Thr Ser
1025				1030						1035				1040
Val	Asp	Lys	Gly	Glu	Glu	Leu	Val	Ser	Pro	Glu	Asp	Leu	Leu	Glu Trp
			1045						1050					1055
Leu	Arg	Pro	Phe	Cys	Ala	Asp	Asp	Ala	Trp	Pro	Val	Arg	Pro	Arg Ile
		1060						1065					1070	
His	Val	Leu	Gln	Ile	Leu	Gly	Gln	Ser	Phe	His	Leu	Thr	Glu	Asp
	1075					1080					1085			
Ser	Lys	Leu	Leu	Val	Phe	Phe	Arg	Thr	Glu	Ala	Ile	Leu	Lys	Ala Ser
	1090					1095					1100			
Trp	Pro	Gln	Arg	Gln	Val	Asp	Ile	Ala	Asp	Ile	Glu	Asn	Glu	Glu Asn
1105				1110						1115				1120
Arg	Tyr	Cys	Leu	Phe	Met	Glu	Leu	Leu	Glu	Ser	Ser	His	His	Glu Ala
			1125						1130					1135
Glu	Phe	Gln	His	Leu	Val	Leu	Leu	Leu	Gln	Ala	Trp	Pro	Pro	Met Lys

```

      1140      1145      1150
Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val
      1155      1160      1165
Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu
      1170      1175      1180
Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
1185      1190      1195      1200
Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
      1205      1210      1215
Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
      1220      1225      1230
His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
      1235      1240      1245
Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
      1250      1255      1260
Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
1265      1270      1275      1280
Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
      1285      1290      1295
Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
      1300      1305      1310
Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
      1315      1320      1325
Leu Arg Ala Ala Gln His Trp Val
      1330      1335

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<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

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acgcgtgctc tctcccgtt ggcaatcagc atggcctttt cgagctcggc ggtgcgcaat
60
tgaaccattt cttccagttg cgatttttca gaaagcagcg tcgattgacc ttcggtcagc
120
ttgcgcacat agcgcttggt gcggctggca aggatatagg cgagtatcaa tgcacctgcg
180
agggcgagga tcgaggcaat ggtcagccag aagcgcaact tgtccatggc tatgttgagg
240
gcgattagcc gacgatcttc ttcacccagg aaactgttga tggttttcct gacgtcatcc
300
atctggcca
309

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<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

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Met Asp Asp Val Arg Lys Thr Ile Asn Ser Phe Leu Gly Glu Glu Asp
 1      5      10      15
Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

```

```

      20      25      30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
      35      40      45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
      50      55      60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
      65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

<210> 1101
 <211> 540
 <212> DNA
 <213> Homo sapiens

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<400> 1101
gtcgacgtta ccaactacgt catgttggag tctggtcagc cgcttcatgc ctatgatgcc
60
gacaacgtca gcgggacgat tgtgttccgt aaggccacg agggtagaca tctattgacc
120
ctcgacgaca ccgatcgac cctcgatcct gacgatctag tcatcgccga cgactcggga
180
gccattggcc tggctggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcaattcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggaggc ctcccgcgc tttgagcggg gcgttgatcc gatttgcgcc
360
cataccgcag ccgttcgcgc agcggaattg ctgcccagt acggcgggtgc caccgtcggt
420
gagcccaccg tcgttgggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaaggtgcc aactgaagagg tcatcgagat cttgacgcgt
540

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<210> 1102
 <211> 180
 <212> PRT
 <213> Homo sapiens

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<400> 1102
Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```


85 90 95
 Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
 100 105 110
 Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Ala Val Arg Ala Ala
 115 120 125
 Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
 130 135 140
 Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
 145 150 155 160
 Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
 165 170 175
 Ile Leu Thr Arg
 180

<210> 1103

<211> 537

<212> DNA

<213> Homo sapiens

<400> 1103

cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
 60
 cgtcaggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
 120
 tcgcgaccca ggtgatcttt ccctcggcat agattgacgt ggcattctcg tcggagtga
 180
 tcaagcagcg cttaggcagc tgctgggccc gcggcttcgc ctagctcgcc ggagcacacg
 240
 aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
 300
 tgacgcgcgac cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
 360
 ccggcgcggc ggcaccccga tcgtcccttg tccgcattggg tctcccctcc actacctacc
 420
 caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggccccaaac
 480
 cgggggcccaa gccgggcccc aaccatggga tcaaccggat gtccgtacat cagcgct
 537

<210> 1104

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1104

Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
 1 5 10 15
 Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
 20 25 30
 Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
 35 40 45
 Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
 50 55 60
 Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

145

<210> 1107

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggcttctata
 60
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cacctcaacg
 120
 agaacctcga agagcgcgct gccagcgca cacaggcgct ggctgaagcc aaccaacgcc
 180
 tggcaaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
 240
 atggaagccg ggggccagct caccggcggc atcgcccatg atttcaaca catgctgacc
 300
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggcggggcg cagcgacgaa
 360
 atcgcccgnc ttactgacgc cgccgtatcg tccgcccatc gcgcggccgc cctcacccat
 420
 cggtctgctgg cggttctcgcg ccgccagtcg ctggccccc gcccgctgga ccccaaccag
 480
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cagctcaaa
 540
 gtgcaactgg gccgcgatat ctggcccgtg aataccgatg ccagccagtt ggaaaacgcc
 600
 ctgctcaacc tggcgatc
 618

<210> 1108

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1108

Met	Arg	Pro	Asn	Ala	Asn	Ser	Pro	Lys	Arg	Pro	Cys	Ala	Thr	Ser	Thr
1				5					10					15	
Arg	Thr	Ser	Lys	Ser	Ala	Ser	Pro	Ser	Ala	His	Arg	Arg	Trp	Leu	Lys
			20						25					30	
Pro	Thr	Asn	Ala	Trp	Gln	Asn	Lys	Met	Phe	Lys	Arg	Lys	Arg	Ala	Glu
			35					40				45			
Asp	Ala	Leu	Arg	His	Ala	Gln	Lys	Met	Glu	Ala	Gly	Gly	Gln	Leu	Thr
			50				55					60			
Gly	Gly	Ile	Ala	His	Asp	Phe	Asn	Asn	Met	Leu	Thr	Gly	Ile	Ile	Gly
65					70					75				80	
Ser	Leu	Asp	Leu	Met	Gln	Arg	Tyr	Ile	Xaa	Ala	Gly	Arg	Ser	Asp	Glu
				85					90					95	
Ile	Gly	Arg	Leu	Thr	Asp	Ala	Ala	Val	Ser	Ser	Ala	His	Arg	Ala	Ala
			100					105					110		
Ala	Leu	Thr	His	Arg	Leu	Leu	Ala	Phe	Ser	Arg	Arg	Gln	Ser	Leu	Ala
			115				120					125			
Pro	Arg	Pro	Leu	Asp	Pro	Asn	Gln	Leu	Val	Ala	Ser	Leu	Glu	Asp	Leu

130 135 140
 Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly
 145 150 155 160
 Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala
 165 170 175
 Leu Leu Asn Leu Ala Ile
 180

<210> 1109
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 1109
 accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
 60
 agcctcaaga tcgtcgcacc gctggggggc atcctcgtgc ccttgatca ggtgcccgat
 120
 cccgttttcg ccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa
 180
 ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg
 240
 atcagacccc cggaaggcat cgaggttctg gtccatctcg gactggatac cgtgatgctg
 300
 cgcggcgaca gctatccccc ccccn
 325

<210> 1110
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1110
 Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser
 1 5 10 15
 Leu Lys Pro Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu
 20 25 30
 Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val
 35 40 45
 Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro
 50 55 60
 Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr
 65 70 75 80
 Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp
 85 90 95
 Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro
 100 105

<210> 1111
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaaacccg tggcgaattc
 120
 gcagtacgtg ggggcatcgt cgacgtcttc ccaccggtgc tagaacaccc ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac
 300
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggtacg gcaacggtca agctt
 385

<210> 1112

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1112

Xaa	Arg	Val	Ala	Pro	Val	Arg	Leu	Ala	Val	Gly	Glu	Glu	His	Asp	Leu
1				5					10					15	
Thr	Glu	Leu	Ala	Thr	Glu	Leu	Val	Asn	Ala	Ala	Tyr	Ser	Arg	Val	Asp
		20					25						30		
Met	Val	Glu	Arg	Arg	Gly	Glu	Phe	Ala	Val	Arg	Gly	Gly	Ile	Val	Asp
	35					40					45				
Val	Phe	Pro	Pro	Val	Leu	Glu	His	Pro	Val	Arg	Ile	Asp	Phe	Phe	Gly
	50				55					60					
Asp	Glu	Ile	Glu	Glu	Met	Thr	Ser	Phe	Ala	Val	Ala	Asp	Gln	Arg	Ser
65				70					75				80		
Thr	Asp	Glu	Thr	His	Gln	Glu	Leu	Ile	Cys	Ala	Pro	Cys	Arg	Glu	Leu
			85				90					95			
Ile	Leu	Thr	Asp	Glu	Val	Arg	Ser	Arg	Ala	Lys	Ala	Leu	Leu	Thr	Asp
		100				105						110			
His	Pro	Glu	Leu	Ala	Asp	Met	Leu	Glu	Arg	Ile	Gly	Asn	Gly	Gln	Ala
		115				120						125			

<210> 1113

<211> 400

<212> DNA

<213> Homo sapiens

<400> 1113

nnncgaccga tgagcgatcg cgaaccgcgc aacctgggat acccctacgt cgagtctttc
 60
 cactcgggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac
 120
 gagcacacca tcgaggagat gcatcagatc gcctcgcgtt acccgcgactc ccgttcggcg
 180
 ttgctgccga tcttcacact ggttcagtcg gtggacggac gcatctcgcc ggtcgggtatt
 240
 gagactgccc ctgaagtgct cggcattacc accgcccagg tatccgggggt ggcgaccttc
 300

tacaccatgt ataagaagca cctgcgggc cagcatcaca tcggtgtctg caccacggcg
 360
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtn
 400

<210> 1114
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1114
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
 1 5 10 15
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
 20 25 30
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
 35 40 45
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
 50 55 60
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
 65 70 75 80
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
 85 90 95
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
 100 105 110
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
 115 120 125
 Glu Val Leu Ala Arg
 130

<210> 1115
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1115
 tctccgactg cacagattag agaaaggact gcgatgacca ttgcgaccac tcatgttgg
 60
 tccctgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc
 120
 ggcgaggctg acttcacgtc gctgctgcag gatcaggttg acggcggttg gaagcgtcag
 180
 gctgagattg gcttgatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg
 240
 gttgattacg gcgcgtggtg gacgtattcc atctctcgtt tcggcgggct gtcctttgag
 300
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
 360
 tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt
 402

<210> 1116
 <211> 134
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1             5             10             15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
      20             25             30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
      35             40             45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
      50             55             60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
      65             70             75             80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
      85             90             95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
      100            105            110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
      115            120            125
Gln Arg Phe Arg Thr Arg
      130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

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ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tgggtgcggaa cccgctggct
60
gaccctacc tgctaggtgt atcggtggc gcaagtgtgg gagcaaccgc agtcacgct
120
ttggggatgt tcacttcgtg gggaactcac cgactcactc ttggtgccct tgtaggggcc
180
ttggcggcag ctgcattggg ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgtcgggcgt ggtgtgtgcc tcggcggtct cgcgttggcg agtttctcg
300
tctttcg
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1             5             10             15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
      20             25             30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
      35             40             45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

50 55 60
 Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
 65 70 75 80
 Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
 85 90 95
 Arg Val Ser Ser Ser Phe
 100

<210> 1119
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1119
 cgcgtccttg agatgcttga gcaggtcggg attgaggatc cagccagggt gatggattcc
 60
 tatccgcata aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
 120
 aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttgacgt cacgggtgcag
 180
 tctcaggtac tggcgactat cgatgagggtg cttgactcgg ttggtgccgc atgcctattt
 240
 attacccacg atttggcggg tgtctcgac atctgccggg agcttatcgt gatgacgtcg
 300
 ggcaaggctg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
 353

<210> 1120
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1120
 Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
 1 5 10 15
 Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
 20 25 30
 Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
 35 40 45
 Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
 50 55 60
 Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
 65 70 75 80
 Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
 85 90 95
 Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
 100 105 110
 Leu Ser His Pro Asp
 115

<210> 1121
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg
 60
 ccagggcac ggtgttcac cgcaccttga cgatgatgaa aggcgtcgcc gccaatctca
 120
 ccgcagcggg cggtcccggt gtgagctatg cacacgcca cgagagcacg cgcgcgatgc
 180
 atgcgcggg cggtccggtc ctggccggca cgcagccta catcgggtcc ttcacacggg
 240
 catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctcgaac
 300
 gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgcc
 360
 gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
 406

<210> 1122

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1				5					10					15	
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
		20					25					30			
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
		35					40					45			
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50					55					60				
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
	65				70					75				80	
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
			85					90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
		100					105						110		
Ala	Thr	Ser	Thr	Gly											
		115													

<210> 1123

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1123

gccggcgatg cggttcattaa ggctaagat gcgcgcacgc ctccccgctt tctcgcct
 60
 cgcctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc
 120
 aagcgaatgc tcccctgttg atattgccgc agtgcgcgag gccctgccgc attcgtcgc
 180
 taaggcgaag ctgcaccgc actccaccaa cgaggatgaa cactcctttt ccattgctcta
 240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacgggtgc
 300
 acccgtctgc cccgatgacc ccaatgaggc agcgcgc
 337

<210> 1124

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1124

Met	Arg	Ser	Leu	Arg	Pro	Lys	Met	Arg	Arg	Arg	Leu	Pro	Ala	Phe	Leu
1				5				10					15		
Ala	Leu	Ala	Ser	Thr	Ala	Leu	Ala	Ala	Ala	Gly	Met	Val	Gly	Cys	Ser
		20					25						30		
Ser	Glu	Gly	Ala	Ser	Pro	Ser	Glu	Cys	Ser	Pro	Val	Asp	Ile	Ala	Ala
	35					40					45				
Val	Arg	Glu	Ala	Leu	Pro	His	Ser	Leu	Ala	Lys	Ala	Lys	Leu	Asp	Pro
	50					55				60					
His	Ser	Thr	Asn	Glu	Asp	Glu	His	Ser	Phe	Ser	Met	Leu	Tyr	Arg	Ala
65			70					75					80		
Gln	Asp	Lys	Glu	Gln	Val	Ser	Leu	Leu	Gly	Thr	Lys	Tyr	Glu	Ala	Asp
			85					90					95		
Gly	Ala	Pro	Val	Cys	Pro	Asp	Asp	Pro	Asn	Glu	Ala	Ala	Arg		
		100						105					110		

<210> 1125

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1125

nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat
 180
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgcgggtt ctgcgaaatc gagcatttcg
 360
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga
 420
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc
 480
 aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgcca agctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 cccgaccgcg tactcggtgt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcgggtccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcaactcgctt cggaagtggg cgtaccgagg ttcaccgacc tgggtgaaggc gatcgagtcg
 180
 accgctccgg acgcgcggt catcgccacg ccggactcgg ctcaccgcca accggctgag
 240
 accgccatcg acgccggcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgccgaag cgatcgtgct ccgcgctgaa cgggcccggc tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
      65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
      100      105      110
Gly Val Arg Leu Met
      115

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<210> 1129

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1129

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ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttcagga tgacgacgtc
120
ggggccgatg aggaagaggc agagttgcgg ggccaacaca cgctcacaga gaagtttgtc
180
tgcttgatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcttgggect ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

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<210> 1130

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1130

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Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
      20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Ala Glu
      35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
      50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
      65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
      85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
      100      105      110

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<210> 1131
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 1131
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 60
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccgataa cccgtatgtg
 120
 ctcggcccg cagtgccgc ggccgccag gaggcatacc tctcccctgc ggacgaagag
 180
 ttttacgggt cggcctttgc cgggatatgc aaaacgtga caggccagaa cgtactgcga
 240
 cgctcgaggaa atcggctggt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
 300
 cgatcgggcg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg
 360
 gtatcgacg aagccgcgc agaccgtacc gtgcatccag gcgcggtgta cctgcatcag
 420
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
 480
 gacctgcgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag
 540
 gagagacgtc gcgcttggtg tcccgatat gtggcgtgcg ggcaggtgga actgacagag
 600
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggtg ctcgctggcc
 660
 ctcgagatgc cc
 672

<210> 1132
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1132
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
 1 5 10 15
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
 20 25 30
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala
 35 40 45
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
 50 55 60
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
 65 70 75 80
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
 85 90 95
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
 100 105 110
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
 115 120 125
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		175
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		190
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		205
210	215	220

<210> 1133

<211> 796

<212> DNA

<213> Homo sapiens

<400> 1133

acgcgtgaag gggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
60
tgtctccggg gacctggcgt aggtctcttc tgccttaacc cttggctttt gcacttcctc
120
tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
180
ccggttcttg tctaaccctt actggcatct tacactctgg gagatagctt ccccttgaga
240
ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt gggttggggg
300
agtcaggtag agtatttttt tttttaaaagc atcattgac acataataag gttgtcata
360
gtccttaate acagacctgt gaaatttgga gaattcacgg cacctaggat gggagttagc
420
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg
480
ctgggtgtcg gggccttcgc cagggaacct cgggggactc tggacgctct ttgtctgcc
540
ttccttttcc ctacctcgc tccccgtga gaaagtggg ctcacgcagc tcagctcagt
600
gacagagggg ttattagggg tagctctggg acccatcttt tggtgatttc ttctctctct
660
ttctctaagt gaataattgt ttctgtctac acttctttat tttctctct ctacagctgc
720
cttctaaaaa tgtgcttttc tggtcctgca gaactgaagc ttgcatggcc tttgttgga
780
ctttcccttc acgcgt
796

<210> 1134

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1134

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

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      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100          105          110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115          120          125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130          135          140
Gln Trp Gly
145

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<210> 1135
 <211> 376
 <212> DNA
 <213> Homo sapiens

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<400> 1135
gatcaggcca cacaggacaa ctctgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcgggtctg
120
gcgacccgctc tgcttcccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttggtt atagtcctctg ctgctaacca cccttggtgc
300
tgggtgctgct ggagaggcat tgtacctgtc catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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<210> 1136
 <211> 67
 <212> PRT
 <213> Homo sapiens

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<400> 1136
Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
      35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50
Asn Tyr Arg
65

55

60

<210> 1137
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1137
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60
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
120
actgtcgcca agggcgccca gattcttttc gtcggcacga agaagcaggc ccaggagtcc
180
atcgttgagc agggcactcg cggtggcatg ccctatgtca accagcgttg gcttggggga
240
atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc
300
atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc
357

<210> 1138
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1138
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
1 5 10 15
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
20 25 30
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
35 40 45
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
50 55 60
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
65 70 75 80
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
85 90 95
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
100 105 110
Lys Lys Glu Leu Leu Met Leu
115

<210> 1139
<211> 456
<212> DNA
<213> Homo sapiens

<400> 1139
gtgcacaggt cgtctgaggc catgccgcgg acgatcgatc cgagtatggc ggcaccttca
60

ccaatcccgt aggaccgct tcgtccagca tcgaccaagg cgctgttgag gcgttcggct
 120
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttgccc
 180
 agactgaggc cttggaggag cgcggccgctc ggggggacgt ggcttcgggc cgggcgttcc
 240
 ttgctctcaa ggacttcgctc gtcgcggctg acaaggaata cgtttggtg gtcgcctgca
 300
 atgcatgctc gagcgtggtg accatcgagg tgaaggacgg ttccggcata gaggtcatcg
 360
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct
 420
 gccgcgtctt cgctgacgct gcccaggacc gctagc
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1				5					10					15	
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
		20						25					30		
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
	35						40					45			
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
	50					55					60				
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65					70					75					80
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
				85					90					95	
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
		100						105					110		
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
		115					120								

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcgccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc
 60
 ggcgaccagt acaaggacgt ggtggcggtt ggctgttggt ttctggtgct gttgttccgt
 120
 ccgaccggca ttctggggcg tccggagggt gagaaagtat gacgagatat cttaaactcg
 180
 cgtttttcag cgccctgttg gtgtggggcg tgccctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg
354

<210> 1142

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1142

Gly	Ala	Met	Leu	Gly	Gly	Leu	Val	Leu	Gly	Val	Ala	Glu	Ala	Phe	Gly
1				5				10						15	
Ala	Asp	Ile	Phe	Gly	Asp	Gln	Tyr	Lys	Asp	Val	Val	Ala	Phe	Gly	Leu
		20				25						30			
Leu	Val	Leu	Val	Leu	Leu	Phe	Arg	Pro	Thr	Gly	Ile	Leu	Gly	Arg	Pro
		35				40						45			
Glu	Val	Glu	Lys	Val											
		50													

<210> 1143

<211> 353

<212> DNA

<213> Homo sapiens

<400> 1143

acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc
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catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg
120
cgagcccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc
180
attcgaaatc ctggcccacg tggccgtcaa tgcccaaacac tacgcgtctt ccgagagacc
240
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gatcgccaag aaggccgcga accacaccat gcaccccggc aggcagtoga ttt
353

<210> 1144

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1144

Met	His	Gly	Val	Val	Arg	Gly	Leu	Leu	Gly	Asp	Arg	Gly	His	Val	Val
1				5				10						15	
Leu	Val	Val	Ala	Arg	Leu	Glu	Ala	Leu	Gly	Glu	Leu	Leu	Gln	Arg	Arg
		20					25						30		
Ser	Leu	Gly	Glu	Arg	Val	Val	Leu	Gly	Ile	Asp	Gly	His	Val	Gly	Gln
		35				40						45			
Asp	Phe	Glu	Cys	Gly	Ala	Val	Glu	Pro	Pro	Ser	Val	Gly	Arg	Ala	Cys
	50				55					60					
Ala	Cys	Cys	Val	Val	Gly	Cys	Ala	Asp	Glu	His	Arg	Leu	Gly	Leu	Cys
65				70				75				80			
Leu	Asp	Arg	Phe	Glu	Leu	His	Phe	Thr	Leu	His	Gly	Ile	Ser	Arg	Ser

85
Met Arg Gln Cys Arg Gly
100

90

95

<210> 1145
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1145
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60
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggtcggt ttcttcccgc cacagagtat ctggccgttc
240
tggtgcgcgc tcgttgctgc catcatgtgc ctccggccga tcttcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggcc gcctcggggt gggcttttga gtactaccgc
360

<210> 1146
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1146
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr
1 5 10 15
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser
20 25 30
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys
35 40 45
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp
50 55 60
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe
65 70 75 80
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly
85 90 95
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser
100 105 110
Gly Trp Ala Phe Glu Tyr Tyr Arg
115 120

<210> 1147
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1147
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60

gccaaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc
 180
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgaaca tgatgaggtt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaaatataa ctgggtcatca gtacacatag aatctgatn
 409

<210> 1148
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1148
 Met Gln Ser Gly Leu Leu Lys Val Met Ile Val Ala Lys Asn Ile Glu
 1 5 10 15
 Ala Lys Lys Ala Ser Thr Phe Phe Ile Asn Pro Glu Leu Ile Met Leu
 20 25 30
 Met Pro Val Gly Gly Ser Leu Cys Ala Leu Gln Ile Gly Arg Gly Ser
 35 40 45
 Leu Leu Ser Ser Leu Leu Ser Leu Pro Pro Ser Pro Leu Ser Ser Leu
 50 55 60
 Leu Ser Ile Pro Arg Ala Val Glu His Asp Glu Val Leu Phe Pro Ser
 65 70 75 80
 Trp Ile Ser Ser Phe Cys Pro Pro His Lys Gly Ala Leu Met Asp Leu
 85 90 95
 Gln Glu Trp Asp Ala Phe Pro
 100

<210> 1149
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 1149
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 60
 cgtgaggcgg tatcgcatat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt
 120
 gacgtggggc gtgtactggg tcacccttat ggcttcgtcg atcgcatctc caagctgggt
 180
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgcgg
 309

<210> 1150

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1150

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Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1             5             10             15
Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
          20             25             30
Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
          35             40             45
Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro
          50             55             60
Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
65             70             75             80
Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
          85             90             95
Lys Leu Gly Arg Val Thr Arg
          100

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<210> 1151

<211> 360

<212> DNA

<213> Homo sapiens

<400> 1151

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gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgccggc ttatgtcggg
60
gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc
120
gggttggttc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg
180
gtgaagttcc tttacacggt tcttaactac tcgaaccggt cgggaatctc gcaatccacc
240
gagcgtcgcc gggagatcct agcggtggtt gacgagctgg atctgttggt ggttgaggac
300
aaccgcgtac gggttactcaa cctcgatggt gatccactgc cgacgttgaa gtcgatggat
360

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<210> 1152

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1152

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Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1             5             10             15
Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
          20             25             30
Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
          35             40             45
Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
          50             55             60
Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

```

```

65              70              75              80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
              85              90              95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
              100              105              110
Leu Pro Thr Leu Lys Ser Met Asp
              115              120

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<210> 1153
 <211> 416
 <212> DNA
 <213> Homo sapiens

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<400> 1153
gcgtggattc gtccctggcgg cgctcgctacc gacctgcccg agaccgggct cgaccagtgtg
60
cgtgacctca tcaagcggat ggaaaagtac cccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccc cactcagggc attgggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactgggtc tgctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccct attgcgatta cgacacgtat gacttcgacg tcgccacctg ggatacctgt
300
gactgttacg ggcgtttccg catccgectg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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<210> 1154
 <211> 138
 <212> PRT
 <213> Homo sapiens

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<400> 1154
Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1      5      10      15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
20     25     30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
35     40     45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
50     55     60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65     70     75     80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
85     90     95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
100    105    110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
115    120    125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
130    135

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<210> 1155
<211> 339
<212> DNA
<213> Homo sapiens

<400> 1155
cttaagttat tttggtcttt gcctctctcc tcaggttgag aagattacag aaatctggga
60
tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaacaaa
120
acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
180
gctttccgtc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg
240
gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc
300
tgttccctca gggactccat agtatTTTTT ttcacgcgt
339

<210> 1156
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1156
Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala
1 5 10 15
Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe
20 25 30
Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe
35 40 45
Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala
50 55 60
Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser
65 70 75 80
Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg
85 90

<210> 1157
<211> 426
<212> DNA
<213> Homo sapiens

<400> 1157
nnacagcctc tctccgaccc ggcgggcggt gcacacgtcc ccgtctgagg agtattcgtg
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ctggcaaaac tcgtgacccg acacctgagg gctatcggt tgcacgttgc cgtcatcatc
120
gttatgcagg tttgcgccca aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc
180
atcaacaagg gcgctgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg
240
ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag
300

gtggcgatgg gaatgggccc tgacgttcgc gacgccatct tcaccgcac ccttgacttc
 360
 tcggccccggg agatcaacaa attcggagca ccatactca ttaccggac taccaacgac
 420
 gtccag
 426

<210> 1158

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1158

Val	Leu	Ala	Lys	Leu	Val	Thr	Arg	His	Leu	Arg	Ala	Tyr	Arg	Leu	His
1				5					10					15	
Val	Ala	Val	Ile	Ile	Val	Met	Gln	Val	Cys	Ala	Gln	Ile	Ala	Ala	Leu
			20				25					30			
Thr	Leu	Pro	Thr	Ile	Asn	Ala	Asp	Ile	Ile	Asn	Lys	Gly	Val	Val	Thr
		35				40					45				
Ala	Asp	Thr	Gly	Tyr	Val	Thr	His	Ser	Leu	Phe	Met	Leu	Ala	Val	
	50				55				60						
Ala	Leu	Gly	Gln	Ala	Ile	Cys	Gln	Val	Ile	Ala	Val	Tyr	Leu	Ala	Ala
65				70					75				80		
Gln	Val	Ala	Met	Gly	Met	Gly	Arg	Asp	Val	Arg	Asp	Ala	Ile	Phe	Thr
			85				90					95			
Arg	Thr	Leu	Asp	Phe	Ser	Ala	Arg	Glu	Ile	Asn	Lys	Phe	Gly	Ala	Pro
		100					105					110			
Ser	Leu	Ile	Thr	Arg	Thr	Thr	Asn	Asp	Val	Gln					
		115					120								

<210> 1159

<211> 434

<212> DNA

<213> Homo sapiens

<400> 1159

tctctccgac cgcgcctggg gcccggtggg gtctcgcggg gacgcgggag aggacggcgc
 60
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgcgcctct gccacgggaa
 120
 gttttctctc agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag
 180
 gccatccgca gaggagcgcg tgctcgtaag ggacttccag cgctgcttg gtgtggctgt
 240
 ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca
 300
 gtgccacagc cttctcaagt ctttctgca gagggtaac gcctccccgg ctggtcgccg
 360
 gaagccttgt gcaaaggctg gtgcccagcc cccaacaggg gcagaggagg gacggtgtct
 420
 ggtggatctg atca
 434

<210> 1160

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1160
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1 5 10 15
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
 20 25 30
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
 35 40 45
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
 50 55 60
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
 65 70 75 80
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
 85 90 95
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
 100 105 110
 Leu Ile

<210> 1161
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1161
 ctgcacacac accaggccac gccacgagg acggccagtc agcatgcagc caatacaccc
 60
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc
 120
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggc cccagcggtt
 180
 atcattccag aagagcagca ggcagaacct tcacctcca agagctgcaa gtgcgctgtg
 240
 gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga
 300
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
 355

<210> 1162
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1162
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1 5 10 15
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
 20 25 30
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
 35 40 45
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

50	55	60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu		
65	70	75
Gln Glu Lys Arg Asp Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro		80
	85	90
Val Met Gly Glu Asn Thr		95
	100	

<210> 1163

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1163

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ngcgcgccag gaagcgggag gtcagctgta caccaggggt aatagaactt ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggt ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccg tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
240
tgtggggagc ccaggcccgga ggtgcgttgg cagaactcca aaggtgacct cagtgtattcc
300
agcaagtaca agatctcctc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1164

Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp		
1	5	10
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu		15
	20	25
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe		30
	35	40
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn		45
	50	55
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser		60
65	70	75
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu		80
	85	90
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala		95
	100	105
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys		110
	115	120
		125

<210> 1165
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1165
 tgggtgggttc cggacacana aaatcacgtg ttgaaccgaa tttcaggcat ggtgaaaggc
 60
 tgcttttagta aagtccttgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt
 120
 ctgcacattc tgctgatgtc caggttcgtg gccctgcccc gtcagttggc tgcagcagga
 180
 ttccccgcgc ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttcgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgcgcga tgaagcgcgt attcctgacg
 300
 tgtgttgccc tgctgttgat tgccgaaatc gtactatggg gtcccgggcc acacttctgg
 360
 gaactgggtca tcggcggtaca gcttttcttc ctgcgcttta atctcatgga agcc
 414

<210> 1166
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1166
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly
 1 5 10 15
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu
 20 25 30
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr
 35 40 45
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala
 50 55 60
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser
 65 70 75 80
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg
 85 90 95
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu
 100 105 110
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu
 115 120 125
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala
 130 135

<210> 1167
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1167
 gtcgaccccg tgggcaagag tcgcggtccc tgacgataac ttcaccccg cggccttgag
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccattctcgg caaaccagtg cgcagttgtg tggatgaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgccctg acggccaccc ccgacccagc
 300
 ccgcacgccc agggcgtacc catcggtcat cgcgtcgcgg acgatgggta ccaggtcgtg
 360
 gcattcctgc gcgggtgtggc ttgcacgca tcgacgcagg aagtcagcct cgccccggga
 420
 cagggcttcc ttactaagtt ccgcggtttt ctttcccgac gcgt
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20						25					30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
		35					40					45			
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50					55					60				
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65				70					75					80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90					95		
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctgggtcgg ggacagcctc
 60
 cttagacctt tctggccaat gggaacagga atagcccggg gctttctagc tgctatggac
 120
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttgaagt gctggcagag
 180
 agggaaagta ttacaggtt gctgcctcag accacccttg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgaccc tgtcactcgg tatcccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccatctt atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaactgt
 480
 acagat
 486

<210> 1170

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1170

Arg	Glu	Gln	Asn	Gly	His	Gln	Leu	Leu	Val	Ala	Leu	Val	Gly	Asp	Ser
1			5						10					15	
Leu	Leu	Glu	Pro	Phe	Trp	Pro	Met	Gly	Thr	Gly	Ile	Ala	Arg	Gly	Phe
			20					25					30		
Leu	Ala	Ala	Met	Asp	Ser	Ala	Trp	Met	Val	Arg	Ser	Trp	Ser	Leu	Gly
	35						40					45			
Thr	Ser	Pro	Leu	Glu	Val	Leu	Ala	Glu	Arg	Glu	Ser	Ile	Tyr	Arg	Leu
	50					55					60				
Leu	Pro	Gln	Thr	Thr	Pro	Glu	Asn	Val	Ser	Lys	Asn	Phe	Ser	Gln	Tyr
65					70					75				80	
Ser	Ile	Asp	Pro	Val	Thr	Arg	Tyr	Pro	Asn	Ile	Asn	Val	Asn	Phe	Leu
			85						90					95	
Arg	Pro	Ser	Gln	Val	Arg	His	Leu	Tyr	Asp	Thr	Gly	Glu	Thr	Lys	Asp
			100					105						110	
Ile	His	Leu	Glu	Met	Glu	Ser	Leu	Val	Asn	Ser	Arg	Thr	Thr	Pro	Lys
		115						120					125		
Leu	Thr	Arg	Asn	Glu	Ser	Val	Ala	Arg	Ser	Ser	Lys	Leu	Leu	Gly	Trp
	130						135				140				
Cys	Gln	Arg	Gln	Thr	Asp	Gly	Tyr	Ala	Gly	Val	Asn	Val	Thr	Asp	
145					150						155				

<210> 1171

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1171

acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga
 60
 ggcagcgcca ggtgctggcg ctgcccagg ccccgtagca agtggggccc atagcagccg
 120
 actcgctaga cctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg
 180
 cctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtccttcaa gactacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc
 300
 tgccgggaca ctgcaggctg ggcgcgcgc gccctggag ggcagggtcaa aateccggaa
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcgtaaatg acgacggcga gcattctgcc gagcagggtga tgcgagccac ccgcggtgct
60
ggacttgggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg
120
tactatgacg cctactacgg ctcggtcag aaagtccgta cctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc
240
cggctgggtg agcgactgc tgacccgatg gcgatgtacc gtcctgatct atgcacggtc
300
ccggccaata tggccggaag tcccgcagga tctttcccga tcggtctatc agagaccgac
360
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggcgg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1 5 10 15
 Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
 20 25 30
 Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
 35 40 45
 Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
 50 55 60
 Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
 65 70 75 80
 Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
 85 90 95
 Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
 100 105 110
 Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
 115 120 125
 Met Ala Pro Ile Met Ala Asp Arg Ile Tyr Arg Val Gly Ala Ala
 130 135 140
 Leu
 145

<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

gatcgactg caatccaccc acatctactt gatatgaaaa ttgggtcaagg caaatatgag
 60
 caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat
 120
 cgctgggtaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct
 180
 gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagtta
 240
 ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
 300
 aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
 360
 gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc
 420
 ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
 480
 ggcttgcagg tcaagcaggg gaagtcgggt ttgtggtcac atttaattcc ttttcaggac
 540
 agagaagaga accaagagcc cttgacagaa tcaccagttg ccctcggacc agaaagaaaa
 600
 aaatctgact caggagttat gttgccaacg ctcagggtct ctcttattca ggacatgagg
 660
 catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga
 720
 ctgtctcta
 729

<210> 1176
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1176
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1 5 10 15
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
 20 25 30
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
 35 40 45
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
 50 55 60
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
 65 70 75 80
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
 85 90 95
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
 100 105 110
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
 115 120 125
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
 130 135 140
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
 145 150 155 160
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
 165 170 175
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
 180 185 190
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
 195 200 205
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
 210 215 220
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
 225 230 235 240
 Leu Ser Leu

<210> 1177
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 1177
 acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc
 60
 cgtcgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa
 120
 gctcatcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
 180
 cgtcgatctc ggtactgccc atggcgatcat gaaggatcgc gcgatacggg gcgacgaccc
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggtagc acgtccgtgg
 300
 ccaacaggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg
 360
 tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat
 420
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga
 480
 cgacgaaacg ccccgacgcc gtaacgcctt gggcttggag atcgcaggtc cacttctctg
 540
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 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
1				5					10					15	
Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
		35					40					45			
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
	50					55					60				
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
65				70					75					80	
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
			85					90						95	
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
		100						105					110		
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
		115					120					125			
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
	130					135					140				
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
145				150						155				160	
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
			165					170					175		
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
		180						185					190		

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgagggtg ctcctgtgct
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 gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg
 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc ttccagtcctc ttctgaaggc tgcatttggc aatgtgaccc
 240
 tcgggggtggg gaaggcatca gaggaatata ggctatggga cgccagaggc agcgtcctgg
 300
 ggacaaagcc cacttcttcc catgcccagg gcttctcat ggacccagca tgggtggacgt
 360
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc
 420
 agagtctcat aggaagatgc atgggtccaca caacagttag tgggcaggga gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt gggtttataac ccaagatccc ttgtcccatt
 540
 ggtgcctcct gaatctccca cctcccggcg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1			5						10					15	
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
			20					25					30		
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
		35					40					45			
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50					55				60					
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
65					70				75					80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
			85					90						95	
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
			100					105							

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtcgactacc tcgatgttcc cccgcgtcag atggctctccg tggctactgc catgattccg
 60
 ttccctcgagc acgacgaagc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct
 120
 gtgccgtgctc tgcgttcgga ggctccgttc gtcggtaccg gtatggagca gcgtgctgct
 180
 tacgacgccc gcgatgtcat tgctgcttcg gccacaggtg tggctgagac cgtgtcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgcacaca cctacctgct gcgcaagttc
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tgttgacgag gg
352

<210> 1182
<211> 117
<212> PRT
<213> Homo sapiens

<400> 1182
Val Asp Tyr Leu Asp Val Ser Pro Arg Gln Met Val Ser Val Ala Thr
1 5 10 15
Ala Met Ile Pro Phe Leu Glu His Asp Asp Ala Asn Arg Ala Leu Met
20 25 30
Gly Ala Asn Met Gln Arg Gln Ala Val Pro Leu Leu Arg Ser Glu Ala
35 40 45
Pro Phe Val Gly Thr Gly Met Glu Gln Arg Ala Ala Tyr Asp Ala Gly
50 55 60
Asp Val Ile Val Ala Ser Ala Thr Gly Val Val Glu Thr Val Ser Ala
65 70 75 80
Gly Phe Ile Thr Ile Met Asp Asp Glu Gly Gln Arg His Thr Tyr Leu
85 90 95
Leu Arg Lys Phe Glu Arg Thr Asn Gln Gly Thr Cys Tyr Asn Gln Lys
100 105 110
Pro Leu Leu Thr Arg
115

<210> 1183
<211> 432
<212> DNA
<213> Homo sapiens

<400> 1183
gatccttctg ggcgctggtc caagcgctg gtgaggccgt cctctcctgc agaacccegg
60
cctcttctgccc cctgcccget cacctgttct gtctctgtca cctcctccag gaagcctgcc
120
tggccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctcctg
180
ggctcctgga ggccaggcca cgtcctcctc cctctctgggt gagtgagagg cacagcctgg
240
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tcctctcatg agtgggtgcc
300
gtccagggtct gtccctgggct ggctgcgagg aggaggttgg cctcgcgagg ccatgtgcgt
360
gacagtggag acatcgccag cctcctgctt gcacagctga cggcagcccc tctctctcca
420
gccatgtccc ca
432

<210> 1184
<211> 141
<212> PRT
<213> Homo sapiens

<400> 1184

Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1 5 10 15
 Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
 20 25 30
 Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
 35 40 45
 Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
 50 55 60
 Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
 65 70 75 80
 Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
 85 90 95
 Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
 100 105 110
 Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Ser Ala Gly Glu
 115 120 125
 Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
 130 135 140

<210> 1185

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1185

accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
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 gaattacgcg gcaaatatgt attgttgggt gaaggtgtac ggggctctct atctaaacaa
 120
 gtcacatcaata aataccaatt atccgagggt catgaaccac aaaagtctcg ccttggettta
 180
 aaagaaattt gggaaataga ccagaaaaa cacaaagaag gcagagtcag tcataccatg
 240
 ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaacaat
 300
 caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccctac
 360
 caagaatttc aacgctttta acaccatccg attatcgagg agctattaac tggcggtaaa
 420
 cgc
 423

<210> 1186

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1186

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1 5 10 15
 Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
 20 25 30
 Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

35 40 45
 Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
 50 55 60
 Glu Ile Asp Pro Glu Lys His Lys Gly Gly Arg Val Ser His Thr Met
 65 70 75 80
 Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
 85 90 95
 Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
 100 105 110
 Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
 115 120 125
 His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
 130 135 140

<210> 1187

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1187

acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagcgaa ttcaggggct
 60
 aagggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatattggt
 120
 gtaccactg ctccaatttc tctcaagca acatcaagtg ttgatttaaa agtgaatctt
 180
 aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
 240
 gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
 300
 attagttatt actatgctaa aagtgatgta gcaaatacct atcagggttta tgccacggta
 360
 gatgggaagt cgactgatga taccggt
 387

<210> 1188

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1188

Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
 1 5 10 15
 Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
 20 25 30
 Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
 35 40 45
 Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
 50 55 60
 Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
 65 70 75 80
 Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
 85 90 95
 Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

100 105 110
 Thr Tyr Gln Val Tyr Ala Thr Val Asp Gly Lys Ser Thr Asp Asp Thr
 115 120 125
 Gly

<210> 1189
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1189
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 60
 ctgggtgctg gtttcattgg cggcacgtgt gcagggttttc tggccgggta cagcgccaag
 120
 gccattgccc gctgggcacg gctgcccagc agcctggatg cgctcaaacc gattctgatc
 180
 atttcgctgc tggccagcct gttaactggg ttggtgatga tctacgtggt cggccagccg
 240
 gtggcggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
 300
 attctcctgg gcntgttgct cggcggctag
 330

<210> 1190
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1190
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu
 1 5 10 15
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly
 20 25 30
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu
 35 40 45
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu
 50 55 60
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro
 65 70 75 80
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly
 85 90 95
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly
 100 105

<210> 1191
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1191
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 60

gcagggacta acggacagac catgcagaca ccgccggtgg tgcgccgca ggactgggag
 120
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccg cgacgcactc
 180
 gccgccgaac ggaggcgcac gccgtggatg gaagtgacaa aaacctacgc attcgaggcg
 240
 ccctcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac
 300
 cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1				5				10					15	
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Ser
			20					25					30	
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu
			35					40					45	
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Met
	50					55					60			
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser
65				70						75				80
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile
			85						90					95
Tyr	Arg	Ala	Phe	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His
			100					105					110	

Cys Arg

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catcttgtag ctcttctttc tctacactna ggttgcctcc
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 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact
 120
 cccagcctcc tggccccttc tgtacatgat ttcccttggt gccactccat gcatttttct
 180
 tggctcagga cttagtgggc ctccatggga cttggtacct ctacttggtc cttcttgga
 240
 tctgtaactt tgtgttcccc accattcttt cctttatgaa ccgatgggtgc aacagcatga
 300
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
 360
 ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga
 420

tgggttgatg aaggggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttgggtgtgtg tagtcccctg gttcagagtt gtccagaaat
 540
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgtctcaaga tagcagtgcg
 600
 ttcccagccc ctacaggtgt atacagcaca aaggggagga ccccctagtg tggctgtcac
 660
 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gcttttagaga tctgggccccg
 720
 ag
 722

<210> 1194

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1194

Met	Val	Gln	Gln	His	Asp	Tyr	Leu	Lys	Phe	Leu	Val	Thr	Pro	Ser	Cys
1				5					10					15	
Phe	Ser	Gly	Gly	Lys	Met	Pro	Thr	Ala	Gln	Glu	Ile	Val	Leu	Pro	Phe
		20						25					30		
Glu	Arg	Gly	Gln	Gly	Met	Gly	Ala	Cys	Pro	Glu	Lys	Gly	Asp	Gly	Leu
		35					40					45			
Met	Lys	Gly	Gly	His	Ser	Ala	Arg	Glu	Glu	Gly	Ala	Arg	Thr	Leu	Ser
	50					55					60				
Val	Leu	Phe	His	Glu	Glu	Asp	Tyr	Val	Gly	Val	Cys	Ser	Pro	Leu	Val
65					70					75				80	
Gln	Ser	Cys	Pro	Glu	Ile	Ala	Gln	Cys	Lys	Glu	Gln	Phe	Ser	Lys	Asp
				85					90					95	
Gln	Lys	Ser	Cys	Leu	Lys	Ile	Ala	Val	Arg	Ser	Gln	Pro	Leu	Gln	Val
			100					105					110		
Tyr	Thr	Ala	Gln	Arg	Glu	Gly	Pro	Ser	Val	Ala	Val	Thr	Glu	Gly	
		115					120						125		
Ser	Gly	Arg	Pro	Val	Val										
															130

<210> 1195

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1195

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 gtgagtaatg ggggcggcgc ggccagacgc gctcccagcc tcttggcgag agtgtgtccc
 120
 ggtttcccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc
 180
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga
 240
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggc
 300

aagcgtaaatt cccgtccaac ctgtatcaact gcgaagagct cgttcgggag cgctttttgg
 360
 aaatgcagat tcttagcccc caccagatc t
 391

<210> 1196

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1196

Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys
 1 5 10 15
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln
 20 25 30
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp
 35 40 45
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr
 50 55 60
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val
 65 70 75 80
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu
 85 90 95
 Phe Gly Asn Ala Asp Ser
 100

<210> 1197

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1197

acgcgtgatg atcatgaaaa tggtagacag cgtctagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgtaaactga caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacgggttaa agcgtagcc gatgatgctg aatctgaaat ggccacgatt
 180
 gcctgtgcga ttgataacgt agcagagctg tttaacccaa atgtagttaa agtcgtttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggg
 300
 tttatggaaa aaacagacga tcaagcggtta ccagcggatt ttctgcgtt gcgtcatatt
 360
 ggtccgatg tttaccgcac gacatn
 386

<210> 1198

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1198

Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

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1           5           10           15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
                20                25                30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
                35                40                45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
                50                55                60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
65                70                75                80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
                85                90                95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
                100                105                110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
                115                120                125

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<210> 1199

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1199

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ttacgggcaa attgcgtcgc tccagcgggtt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctgggtggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccaggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcgc ctgccaaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

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<210> 1200

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1200

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Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
1           5           10           15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
                20                25                30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
                35                40                45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
                50                55                60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
65                70                75                80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
                85                90                95
Val Ile Gln Leu Leu

```

100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
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 60
 atgatactca ccgtgctgcg catggccaag gatgaccgca accgttggaa tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttccgcy tgctggaaca gttcaagggc
 180
 cgcgcgaagg tcacggtggt tggctcggcg cgcacgcggg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggt
 300
 ggcgccggca tcattggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
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 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttggagtt
 120

ggtcttcttg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcgtt
 240
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgacccaaca tgagcatcgt ggtgaaggcg
 360
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg
 420
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 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro	Asp	Met	Ala	Ala	Arg	Leu	His	Ser	Thr	Arg	Val	Leu	Gly	Thr	Phe
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Gly	Tyr	His	Ala	Pro	Glu	Tyr	Ala	Met	Thr	Gly	Gln	Leu	Ser	Ser	Lys
	20						25					30			
Ser	Asp	Val	Tyr	Ser	Phe	Gly	Val	Gly	Leu	Leu	Glu	Leu	Leu	Thr	Gly
	35					40					45				
Arg	Lys	Pro	Val	Asp	Leu	Pro	Leu	Pro	Arg	Gly	Gln	Gln	Ser	Leu	Val
	50				55					60					
Thr	Trp	Ala	Thr	Pro	Arg	Leu	Cys	Glu	Asp	Lys	Val	Arg	Gln	Cys	Val
65				70					75					80	
Asp	Ser	Arg	Leu	Gly	Val	Glu	Tyr	Pro	Pro	Lys	Ser	Val	Ala	Lys	Phe
			85					90					95		
Ala	Ala	Val	Ala	Ala	Leu	Cys	Val	Gln	Tyr	Glu	Ala	Asp	Phe	Arg	Pro
	100						105					110			
Asn	Met	Ser	Ile	Val	Val	Lys	Ala	Leu	Gln	Pro	Leu	Leu	Asn	Ala	Arg
	115					120						125			
Ala	Ser	Asn	Pro	Gly											
	130														

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

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 120
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgccaatc
 240
 aagatgtgga gggaatctgt ctgcgcagaa cctggatctc gtggttgtag gacgttgcc
 300

ccttctcgct cggacgccgc tcatgctccg ccacgtcgct gacgagtgga caaggtatcc
 360
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 407

<210> 1206

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1206

Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
 1 5 10 15
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
 20 25 30
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser
 35 40 45
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
 50 55 60
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
 65 70 75 80
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
 85 90 95
 Glu Ala Leu Ala Asn Arg Lys
 100

<210> 1207

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1207

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 120
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat
 180
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca
 240
 agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac
 292

<210> 1208

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1208

Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
 1 5 10 15
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
 20 25 30
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

	35		40		45	
Gly	His	Ser	Thr	Cys	Pro	Ser
50				55		60
Leu	Asn	Lys	Thr	Gln	Trp	His
65				70		75
Ile	Ser	Ala	Pro	Gly	Asp	Ser
			85			90
						95

<210> 1209

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1209

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gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgcaggggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccg
180
ggtgtattttt caaatgaggg aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca agggttgggtg gcgatgttag gtactttcct tgatacactt
300
attatttgta caggtttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaactcg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

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<210> 1210

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1210

Leu	Val	Pro	Ile	Met	Ala	Val	Ala	Tyr	Ile	Phe	Ala	Gly	Ile	Ile	Ile
1				5				10					15		
Leu	Leu	Met	His	Ala	Ser	Glu	Val	Ile	Pro	Ala	Ile	Ser	Thr	Ile	Val
		20						25					30		
Glu	Tyr	Ala	Phe	Thr	Pro	Ala	Ser	Ala	Gln	Gly	Gly	Phe	Ala	Gly	Ala
		35					40					45			
Thr	Val	Trp	Met	Ala	Ile	Arg	Phe	Gly	Val	Ala	Arg	Gly	Val	Phe	Ser
		50				55					60				
Asn	Glu	Ala	Gly	Leu	Gly	Ser	Ala	Pro	Ile	Ala	His	Ala	Ser	Ala	Gln
65					70					75				80	
Thr	Asn	Glu	Pro	Val	Arg	Gln	Gly	Leu	Val	Ala	Met	Leu	Gly	Thr	Phe
				85				90					95		
Leu	Asp	Thr	Leu	Ile	Ile	Cys	Thr	Gly	Leu	Val	Ile	Val	Ile	Ser	Gly
		100						105					110		
Ala	Trp	Thr	Glu	Gly	Leu	Ser	Gly	Ala	Ala	Leu	Thr	Ser	Ala	Ala	Phe
		115					120					125			
Asn	Leu	Ala	Leu	Pro	Gly	Trp	Gly	Gly	Tyr	Leu	Val	Ala	Ile	Ser	

130

135

140

<210> 1211

<211> 480

<212> DNA

<213> Homo sapiens

<400> 1211

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agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccctgac
120
tgccctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcatcggtg
180
ccacctctctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc
240
tttattccct cagagcctcc tgggagcttg ccttggtggt ccttcctgc tccagtctcc
300
acccctctgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttccaca
360
gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg
420
gctcctctgg aaatagttcc ttttgagaag gcctctccag aggctggagt gtgctcgca
480

<210> 1212

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1212

Glu	Glu	Gly	Arg	Glu	Ala	Gly	Glu	Met	Glu	Ser	Ser	Thr	Leu	Gln	Glu
1			5					10						15	
Ser	Pro	Arg	Ala	Arg	Ala	Glu	Ala	Val	Leu	Leu	His	Glu	Met	Asp	Glu
		20						25					30		
Asp	Asp	Leu	Ala	Asn	Ala	Leu	Ile	Trp	Pro	Glu	Ile	Gln	Gln	Glu	Leu
		35					40					45			
Lys	Ile	Ile	Glu	Ser	Glu	Glu	Glu	Leu	Ser	Ser	Leu	Pro	Pro	Pro	Ala
	50					55				60					
Leu	Lys	Thr	Ser	Pro	Ile	Gln	Pro	Ile	Leu	Glu	Ser	Ser	Leu	Gly	Pro
65					70					75				80	
Phe	Ile	Pro	Ser	Glu	Pro	Pro	Gly	Ser	Leu	Pro	Cys	Gly	Ser	Phe	Pro
			85					90					95		
Ala	Pro	Val	Ser	Thr	Pro	Leu	Glu	Val	Trp	Thr	Arg	Asp	Pro	Ala	Asn
			100					105					110		
Gln	Ser	Thr	Gln	Gly	Ala	Ser	Thr	Ala	Ala	Ser	Arg	Glu	Lys	Pro	Glu
		115					120					125			
Pro	Glu	Gln	Gly	Leu	His	Pro	Asp	Leu	Ala	Ser	Leu	Ala	Pro	Leu	Glu
	130					135				140					
Ile	Val	Pro	Phe	Glu	Lys	Ala	Ser	Pro	Glu	Ala	Gly	Val	Cys	Ser	Arg
145					150					155				160	

<210> 1213

<211> 1141

<212> DNA

<213> Homo sapiens

<400> 1213

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 120
 tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
 180
 cagcagcct atggcgggt caccagccac gccacatccg gaaccgacac caccttcgcc
 240
 tgggaccagg aaggccacct ggcgagacg tgtacgctg cacacgggca tgccactgcc
 300
 acccagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
 360
 gaggagcgtt actcctggga tggacggggt tggtctctg acatcaccac cgacgccacg
 420
 accgtatcga ctcacgtcga tgcattgggg cgcgccagtc gtatcaccac taagggccag
 480
 caggtacgag tggactggga cctcgtgacc ggagccccc cctcgattga tggtcgtcct
 540
 gtgcttcccc tgcccggagg acgcacctc ggcgccacac ccacggcgga taccaacct
 600
 tggcgtgagg tcatgcccac cgacctgac aaccttacc agcccgccac ggccactatt
 660
 gaggggtgcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcacct
 720
 tgggtggggc gcgcctctac gacccaacta ccaccacctt cttgtctcct gaccggttaa
 780
 ccccgccgcg cggcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc
 840
 tcacctcac cgatcctctc gggaccacc ccgtcaccga cgaccaactg gcactoctca
 900
 cccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctcgtgcac
 960
 acatcacga tccgatcagc cactggtggg ccaccacaaa agaccggatc ctctcccggt
 1020
 acttctgat cgggtccggc ctcgtcatcg gcggtatcgc gtagcggcca cgggcgtagg
 1080
 aggaccctc ctagccgcgg ccatttcggg gggactcacc tcaggcgggt ttccgctag
 1140
 c
 1141

<210> 1214

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1214

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
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 Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

20 25 30
 Pro Ser Gly Arg Trp Ser Tyr Gly Tyr Asn Glu Ala Gly Ser Leu Ile
 35 40 45
 Ser Ala Thr Gly Pro Arg Thr Gln His Asn Trp Thr His Asp Ala Tyr
 50 55 60
 Gly Arg Leu Thr Ser His Ala Thr Ser Gly Thr Asp Thr Thr Phe Ala
 65 70 75 80
 Trp Asp Gln Glu Gly His Leu Ala Gln Thr Cys Thr Arg Ala His Gly
 85 90 95
 His Ala Thr Ala Thr Gln Tyr Arg Tyr Asp Ala Ala Gly Arg Arg Val
 100 105 110
 Ser Ala Thr Ser Ser Asp Gly Gln Glu Glu Arg Tyr Ser Trp Asp Gly
 115 120 125
 Arg Gly Trp Leu Ser Asp Ile Thr Thr Asp Ala Thr Thr Val Ser Thr
 130 135 140
 His Val Asp Ala Leu Gly Arg Ala Ser Arg Ile Thr Thr Lys Gly Gln
 145 150 155 160
 Gln Val Arg Val Asp Trp Asp Leu Val Thr Gly Ala Pro Thr Ser Ile
 165 170 175
 Asp Gly Arg Pro Val Leu Pro Leu Pro Gly Gly Arg Ile Leu Gly Ala
 180 185 190
 Thr Pro Ile Gly Asp Thr Asn Leu Trp Arg Glu Val Met Pro Thr Asp
 195 200 205
 Pro Asp Asn Pro Tyr Gln Pro Ala Thr Ala Thr Ile Glu Gly Val Pro
 210 215 220
 Glu Thr Ile Arg Met Ala Gly Asn Thr Leu Val Val Asp Gly His Pro
 225 230 235 240
 Trp Trp Gly Arg Ala Ser Thr Thr Gln Leu Pro Pro Pro Ser Cys Leu
 245 250 255
 Leu Thr Arg

<210> 1215

<211> 317

<212> DNA

<213> Homo sapiens

<400> 1215

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 120
 ccccggggtc aaccgggcca tcaccgggag aacgccgctc ctccggagggg gtgttctcgc
 180
 agtcgccggc gtgggtgcgt ggaagaagta ccgcggcacg accttcggcg ggctgctccc
 240
 gtcgtgtgcc ctccgctcg tgctcggtt catcgtgctg aacaaggctg gtcgccgca
 300
 gtacatcgcc tggatcn
 317

<210> 1216

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1216

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Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
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Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
      20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
      35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
      50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
      65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
      85           90           95
Asp Leu Gln Arg Thr Arg
      100

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<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

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naccgctggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
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cgttgtcggg tgaatgatgt ttctggtgat agtcagtggg tagagatgcg aggcagtgtg
120
acagggtggg acagccgctc tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccggtg aagatgctca gcgacgagag
240
cttattttat cggctttgct aaataatatt ccagaccctg ttiggtctaa agatgaaagc
300
ggtcgttatt tggactgtaa ccatgcggtt tgtctgttta atggtttaga gcagagtgat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atggtaata ttatcaagat
420
atgggcggtg aggtattagc gcgaggggag atttttcatt aacattgttg gggtacgct
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

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<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

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Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

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20 25 30
 Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
 35 40 45
 Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
 50 55 60
 Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
 65 70 75 80
 Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
 85 90 95
 Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
 100 105 110
 Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
 115 120 125
 Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
 130 135 140
 Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
 145 150 155 160
 Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
 165 170 175
 Lys Glu Pro Thr Val Asn
 180

<210> 1219

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1219

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 tccagagaaa attaccaaga ccattctgtt agtattttcc agctccacag gcctttggaa
 120
 gttcccagac caccctccct cttttcaaac taaaacaggg atggctctta accaccaccc
 180
 aaagggaagg ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
 240
 ggcccaaccc tgcagcctct gccatttgg gaaagaccgt gagttggaat tatgggtcgg
 300
 tgggggggc
 308

<210> 1220

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1220

Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Pro Glu Lys
 1 5 10 15
 Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
 20 25 30
 Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
 35 40 45
 Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

50 55 60
 Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys
 65 70 75 80
 Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly
 85 90 95

<210> 1221

<211> 569

<212> DNA

<213> Homo sapiens

<400> 1221

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 120
 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tccccctccc
 180
 agtggtccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc
 240
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa
 300
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcc
 360
 gaaggggtccc ttgcagtggg gtggttatgt gcctgcaatc ccagagtgtc ctcgaaggac
 420
 ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt
 480
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca
 540
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 569

<210> 1222

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1222

Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile
 1 5 10 15
 Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val
 20 25 30
 Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser
 35 40 45
 Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser
 50 55 60
 Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys
 65 70 75 80
 Ser His Ser Arg His Ser Leu Pro Arg Asn Ala
 85 90

<210> 1223

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

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120
gtactttcag atgtgttgcc tgggtgttggc caaggccggt gggttctcgg cgaaactgca
180
atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt
240
gaaacaaggc cgtcccccac gatagctcta cggggaccgg gtggagtccc cagacggttg
300
ccctgttccc tcattccatc gctgcaaccc ttacaggcga tgacgattca caaagcgcag
360
ggcagccaat tcacggacgt aacgggtggtc ctgccaccac ccgactcgcc cctcctctct
420
cgtgagttgc tctataccgc catcacgcgt
450

<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

Lys	Leu	Ala	Gln	Ala	Ser	Ala	Asp	Ala	Ala	Ala	Leu	Lys	Leu	Val	Asp
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Ala	His	Arg	Leu	Leu	Cys	Ala	His	Arg	Glu	Gly	Pro	Tyr	Gly	Val	Asp
		20					25					30			
Glu	Trp	Ser	Gln	Arg	Met	Val	Thr	Val	Leu	Ser	Asp	Val	Leu	Pro	Gly
	35					40					45				
Val	Gly	Gln	Gly	Arg	Trp	Val	Leu	Gly	Glu	Thr	Ala	Ile	Val	Thr	His
	50				55				60						
Asn	Leu	Ala	Gln	Leu	Gly	Val	Asn	Asn	Gly	Asp	Cys	Gly	Val	Ile	Val
65				70				75						80	
Glu	Thr	Arg	Pro	Val	Pro	Thr	Ile	Ala	Leu	Pro	Gly	Pro	Gly	Gly	Val
			85				90						95		
Pro	Arg	Arg	Leu	Pro	Cys	Ser	Leu	Ile	Pro	Ser	Leu	Gln	Pro	Leu	Gln
	100						105					110			
Ala	Met	Thr	Ile	His	Lys	Ala	Gln	Gly	Ser	Gln	Phe	Thr	Asp	Val	Thr
	115					120						125			
Val	Val	Leu	Pro	Pro	Pro	Asp	Ser	Pro	Leu	Leu	Ser	Arg	Glu	Leu	Leu
	130				135						140				
Tyr	Thr	Ala	Ile	Thr	Arg										
145					150										

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

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 tcagtgggag gacaaggtcc tcaattcctg gcacattggc ccagagaagt catgaaaacc
 120
 caaagcccc cgaaagtaag aagtagaaaa aaacccgacc ccgaccagat gaagggacct
 180
 gggaaagttt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg
 240
 ggctttgcac acagcatctt catggctttc cacaatgatc ccagaactga tccagagaaa
 300
 cccagggatc aggggttgac ccgacctgt catcatccca ttctacaaat gaggacactg
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 aggcctggtg aaaagggagg ggtggatgga accaggtggc ctggctctaa gaccagagg
 420
 ctggagtgtg ctcatg
 436

<210> 1226

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1226

Met	Val	Asn	Thr	Gly	Met	Ala	Thr	Trp	Glu	Leu	Lys	Val	Leu	Ser	Val
1				5				10				15			
Gly	Gly	Gln	Gly	Pro	Gln	Phe	Leu	Ala	His	Trp	Pro	Arg	Glu	Val	Met
		20					25					30			
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
		35				40						45			
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
		50				55					60				
Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
65					70					75				80	
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
			85					90					95		
Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
		100					105					110			
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
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Gly	Ser	Lys	Thr	Gln	Arg	Leu	Glu	Cys	Ala	His					
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<210> 1227

<211> 756

<212> DNA

<213> Homo sapiens

<400> 1227

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 180

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<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

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Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
		20				25						30			
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35				40					45				
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
	50				55				60						
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70					75					80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
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Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

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 120
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 180

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 240
 ggcaccatcg gcccgaggc gaacttgctt gagcctggcc cggaatcatg tcggcaagtg
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 gacggggagc atccgga
 377

<210> 1230

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1230

Thr	Arg	Arg	Gln	Gln	Leu	Phe	Gly	Tyr	Thr	Ser	Glu	Glu	Pro	Lys	Met
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Leu	Val	Ala	Pro	Met	Ala	Asn	Gln	Gly	Val	Glu	Ala	Thr	Gly	Ala	Met
		20					25					30			
Gly	Thr	Asp	Thr	Pro	Leu	Ala	Val	Leu	Ser	Asn	Cys	Pro	Arg	Met	Leu
	35					40					45				
Trp	Asp	Tyr	Phe	Ser	Gln	Leu	Phe	Ala	Gln	Val	Thr	Asn	Pro	Pro	Leu
	50				55					60					
Asp	Ala	Ile	Arg	Glu	Glu	Leu	Val	Thr	Ser	Leu	Thr	Gly	Thr	Ile	Gly
65				70					75					80	
Pro	Glu	Ala	Asn	Leu	Glu	Pro	Gly	Pro	Glu	Ser	Cys	Arg	Gln	Val	
			85				90						95		
Val	Val	Asn	Tyr	Pro	Ile	Ile	Asp	Ser	Asp	Gln	Leu	Ala	Lys	Ile	Ile
		100					105						110		
His	Ile	Asp	Ala	Asp	Gly	Glu	His	Pro							
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<210> 1231

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1231

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 120
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 180
 aactcttcg atgagtctct gcgtcgctt gagaaactcg cgggtagaag tgctcagttc
 240
 taccaaggcg atatcttga tgetgagtgt ctgcacgca tcttcgaggc tcacgacatc
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 351

<210> 1232

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1232

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 20 25 30
 Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
 35 40 45
 Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
 50 55 60
 Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
 65 70 75 80
 Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
 85 90

<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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 120
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 180
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 240
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 360
 attatttata gcttcctgcc tgacacagct cacttcaaga agtgcacaat gtcagaacgt
 420
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 480
 accatgtgtc gtgcccacag acctagtggg acaattatta cagaagatcc atttaaaagt
 540
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 720
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<210> 1234

<211> 708

<212> PRT

<213> Homo sapiens

<400> 1234

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			20					25					30		
Ser	Gly	Thr	Ile	Ile	Thr	Glu	Asp	Pro	Phe	Lys	Ser	Gly	Ser	Ser	Asp
		35					40					45			
Val	Gly	Arg	Asp	Trp	Asp	Pro	Ser	Ser	Thr	Glu	Gly	Gly	Ser	Ser	Pro
	50				55					60					
Leu	Ile	Cys	Pro	Asp	Ser	Ser	Ala	Arg	Pro	Arg	Val	Lys	Ser	Ser	Tyr
65				70					75					80	
Ser	Met	Glu	Asn	Ala	Asn	Lys	Trp	Ser	Cys	His	Met	Cys	Thr	Tyr	Leu
			85					90					95		
Asn	Trp	Pro	Arg	Ala	Ile	Arg	Cys	Thr	Gln	Cys	Leu	Ser	Gln	Arg	Arg
		100					105					110			
Thr	Arg	Ser	Pro	Thr	Glu	Ser	Pro	Gln	Ser	Ser	Gly	Ser	Gly	Ser	Arg
	115					120					125				
Pro	Val	Ala	Phe	Ser	Val	Asp	Pro	Cys	Glu	Glu	Tyr	Asn	Asp	Arg	Asn
	130				135						140				
Lys	Leu	Asn	Thr	Arg	Thr	Gln	His	Trp	Thr	Cys	Ser	Val	Cys	Thr	Tyr

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Glu Asn Trp Ala Lys	Ala Lys Arg Cys Val Val Cys Asp His Pro Arg					
	165		170		175	
Pro Asn Asn Ile Glu Ala Ile Glu Leu Ala Glu Thr Glu Glu Ala Ser						
	180		185		190	
Ser Ile Ile Asn Glu Gln Asp Arg Ala Arg Trp Arg Gly Ser Cys Ser						
	195		200		205	
Ser Gly Asn Ser Gln Arg Arg Ser Pro Pro Ala Thr Lys Arg Asp Ser						
	210		215		220	
Glu Val Lys Met Asp Phe Gln Arg Ile Glu Leu Ala Gly Ala Val Gly						
225		230		235		240
Ser Lys Glu Glu Leu Glu Val Asp Phe Lys Lys Leu Lys Gln Ile Lys						
	245		250		255	
Asn Arg Met Lys Lys Thr Asp Trp Leu Phe Leu Asn Ala Cys Val Gly						
	260		265		270	
Val Val Glu Gly Asp Leu Ala Ala Ile Glu Ala Tyr Lys Ser Ser Gly						
	275		280		285	
Gly Asp Ile Ala Arg Gln Leu Thr Ala Asp Glu Val Arg Leu Leu Asn						
	290		295		300	
Arg Pro Ser Ala Phe Asp Val Gly Tyr Thr Leu Val His Leu Ala Ile						
305		310		315		320
Arg Phe Gln Arg Gln Asp Met Leu Ala Ile Leu Leu Thr Glu Val Ser						
	325		330		335	
Gln Gln Ala Ala Lys Cys Ile Pro Ala Met Val Cys Pro Glu Leu Thr						
	340		345		350	
Glu Gln Ile Arg Arg Glu Ile Ala Ala Ser Leu His Gln Arg Lys Gly						
	355		360		365	
Asp Phe Ala Cys Tyr Phe Leu Thr Asp Leu Val Thr Phe Thr Leu Pro						
	370		375		380	
Ala Asp Ile Glu Asp Leu Pro Pro Thr Val Gln Glu Lys Leu Phe Asp						
385		390		395		400
Glu Val Leu Asp Arg Asp Val Gln Lys Glu Leu Glu Glu Glu Ser Pro						
	405		410		415	
Ile Ile Asn Trp Ser Leu Glu Leu Ala Thr Arg Leu Asp Ser Arg Leu						
	420		425		430	
Tyr Ala Leu Trp Asn Arg Thr Ala Gly Asp Cys Leu Leu Asp Ser Val						
	435		440		445	
Leu Gln Ala Thr Trp Gly Ile Tyr Asp Lys Asp Ser Val Leu Arg Lys						
	450		455		460	
Ala Leu His Asp Ser Leu His Asp Cys Ser His Trp Phe Tyr Thr Arg						
465		470		475		480
Trp Lys Asp Trp Glu Ser Trp Tyr Ser Gln Ser Phe Gly Leu His Phe						
	485		490		495	
Ser Leu Arg Glu Glu Gln Trp Gln Glu Asp Trp Ala Phe Ile Leu Ser						
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Leu Ala Ser Gln Pro Gly Ala Ser Leu Glu Gln Thr His Ile Phe Val						
	515		520		525	
Leu Ala His Ile Leu Arg Arg Pro Ile Ile Val Tyr Gly Val Lys Tyr						
	530		535		540	
Tyr Lys Ser Phe Arg Gly Glu Thr Leu Gly Tyr Thr Arg Phe Gln Gly						
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Val Tyr Leu Pro Leu Leu Trp Glu Gln Ser Phe Cys Trp Lys Ser Pro						
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Ile Ala Leu Gly Tyr Thr Arg Gly His Phe Ser Ala Leu Val Ala Met						

580 585 590
 Glu Asn Asp Gly Tyr Gly Asn Arg Gly Ala Gly Ala Asn Leu Asn Thr
 595 600 605
 Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg
 610 615 620
 Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu
 625 630 635 640
 Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr
 645 650 655
 Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn
 660 665 670
 His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg
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<210> 1235

<211> 383

<212> DNA

<213> Homo sapiens

<400> 1235

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 240
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 383

<210> 1236

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1236

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 Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro
 35 40 45
 Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser
 50 55 60
 Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

65		70		75		80									
Ala	Gln	Leu	Ala	Ala	Leu	Gly	Val	Ala	Ala	Asp	Tyr	Leu	Asp	Gly	Ile
			85					90						95	
Gly	Met	Gln	Ala	Ile	Ala	Glu	His	Glu	His	Glu	Leu	Ala	Ala	Arg	Met
			100					105						110	
Leu	Glu	Asp	Tyr	Gln	Thr	Val	Lys	Gly	Val	Gln	Pro	Glu	Arg	Gly	
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<210> 1237

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 1237

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ttggaatcca ccaaagaaaa aacgcttcac tgtcaagctg caaacatttt ttgagacatt
660
cctgagagcc agttcacctc aacaggcttt tgacattatg aaggaagcaa ttggcaaact
720
actgctagcc gctgaagtat tcagtgaaac atctactctg ggaccaaaga ccttccatag
780
atgcagattc tgctttcaac ttctaacttt tgatattggt tatggcagtt tcatgtaccc
840
tgtagtgtc caggtacacg agcattttaa ttttcaagat tatgataata tggattttga
900
ggaccaaaat acagaagaat tcctttttaa tgacactttc aattttctct tcctaatga
960
atcatcactt tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa
1020
gggtgaaaac tatcaaaagg aactaaatca gtgtctgtcc ttagaagaaa ttaactcaat
1080
tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tcccatctac
1140
tactcctggg attcagtcac tgatgcatga attttatgat gtggcaaata ctgtgggaaa
1200

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tcttggtca gtcctgaccc aatactgggc tcttttaaat gtatttgaac aatttcagtt
 1260
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa
 1320
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaat aaaaaagctg cagttccaca
 1380
 aattaaaaat gaaaataaag aaatacattg cagtgtgatg gaaaacacac catgtcatat
 1440
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa
 1500
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc
 1560
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 1608

<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

Met	Cys	Gln	Leu	Gly	Leu	His	Gln	Lys	Ala	Asn	Arg	Leu	Pro	Glu	Ile
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Gln	Gln	Pro	Leu	Cys	Arg	Lys	Glu	Gly	Leu	Cys	Gln	Ile	Val	Arg	Arg
		20						25					30		
Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln
		35					40					45			
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val
	50					55					60				
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn
65					70					75				80	
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp
			85					90						95	
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro
		100						105					110		
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys
		115					120					125			
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu
		130					135					140			
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile
145					150					155				160	
Gly	Lys	Leu	Leu	Leu	Ala	Ala	Glu	Val	Phe	Ser	Glu	Thr	Ser	Thr	Leu
			165					170					175		
Gly	Pro	Lys	Thr	Phe	His	Arg	Cys	Arg	Phe	Cys	Phe	Gln	Leu	Leu	Thr
		180						185					190		
Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val
		195					200					205			
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp
		210				215					220				
Gln	Asn	Thr	Glu	Glu	Phe	Leu	Leu	Asn	Asp	Thr	Phe	Asn	Phe	Leu	Phe
225					230					235				240	
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu
			245						250				255		
Tyr	Arg	Ser	Asp	Val	Phe	Lys	Gly	Glu	Asn	Tyr	Gln	Lys	Glu	Leu	Asn

	260		265		270
Gln Cys Leu Ser Leu Glu Glu Ile Asn Ser Ile Met Thr Phe Ile Lys					
	275		280		285
Glu Leu Gly Ser Leu Gly Gln Phe Gln Leu Leu Phe Pro Ser Thr Thr					
	290		295		300
Pro Gly Ile Gln Ser Leu Met His Glu Phe Tyr Asp Val Ala Asn Pro					
305		310		315	320
Val Gly Asn Pro Gly Ser Val Leu Thr Gln Tyr Trp Ser Leu Leu Asn					
	325		330		335
Val Phe Glu Gln Phe Gln Phe Met Asn Lys Lys Thr Gln Pro His Pro					
	340		345		350
Leu Glu Trp Asn Ser Phe Thr Glu Asp Lys Asn Ile Glu Lys Pro Gln					
	355		360		365
Val Pro Phe Asp Ala Ile Glu Asn Lys Lys Ala Ala Val Pro Gln Ile					
	370		375		380
Lys Asn Glu Asn Lys Glu Ile His Cys Ser Asp Asp Glu Asn Thr Pro					
385		390		395	400
Cys His Ile Lys Gln Ile Phe Thr His Pro His Leu Glu Leu Asn Pro					
	405		410		415
Asp Phe His Pro Lys Ile Lys Asp Tyr Tyr Cys Glu Val Pro Phe Asp					
	420		425		430
Val Val Thr Val Thr Ile Gly Val Glu Thr Pro Lys Cys Leu Cys Lys					
	435		440		445
Val His Leu Tyr Glu Gln Ala Gly Pro Ser					
	450		455		

<210> 1239

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1239

atacctactg aacgtgaacg aacagaaagg ctaattaaaa ccaaattaag ggagatcatg
60

atgcagaagg atttggagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa
120

atgggtgtgca acttgcgga attcaaggaa tttatagaca atgaaatgat agtgatcctt
180

ggtcaaattg atagccctac acagatattt gagcatgtgt tctgggctc agaatggaat
240

gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgtcactcga
300

gagatagata actttttccc aggagtcttt gagtatcata acattcgggt atatgatgaa
360

gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag
420

aaacatggat ctaaattgcct tgtgcac
447

<210> 1240

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1240

Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1 5 10 15
 Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
 20 25 30
 Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
 35 40 45
 Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
 50 55 60
 Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
 65 70 75 80
 Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
 85 90 95
 Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
 100 105 110
 His Asn Ile Arg Val Tyr Asp Glu Ala Thr Asp Leu Leu Ala Tyr
 115 120 125
 Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
 130 135 140
 Lys Cys Leu Val His
 145

<210> 1241

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1241

acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
 60
 aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
 120
 taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
 180
 gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa ccttcccccc
 240
 acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc
 300
 aggggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
 360
 ggatttgtgt tgtgaggctg gtgggtgcgtt cttttctttc tttctcgcg tggtttcccg
 420
 gagtgccctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt
 480
 attcatgct
 489

<210> 1242

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1242

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

      1             5             10             15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20             25             30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35             40             45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50             55             60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65             70             75             80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85             90             95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100            105            110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115            120            125

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<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

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ntagactccg tcgatcccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
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gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtgggtt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgtgtgtgt ccctaccacc cgcagtcgcc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

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<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

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Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
      1             5             10             15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20             25             30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35             40             45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50             55             60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65             70             75             80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

85 90 95
 Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
 100 105 110
 Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
 115 120 125
 Glu Ala
 130

<210> 1245
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1245
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 60
 ccacaatcta tgcccgtagc ttttctgagc tccaggagtt ttttagcact gccagacttc
 120
 tctggagagg aggagggttc tgccactttt caatttcgaa cttggaataa ggcagggtt
 180
 ctgctgttca gtgaacttca gctgatttca gggggatcc tctctttct gagtgatga
 240
 aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcagggtgc
 300
 gaattaaatg atgggcagtg gcattctgtc tctttatct
 339

<210> 1246
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1246
 Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
 1 5 10 15
 Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
 20 25 30
 Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Val Ser Ala
 35 40 45
 Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
 50 55 60
 Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
 65 70 75 80
 Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
 85 90 95
 Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
 100 105 110
 Ser

<210> 1247
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac gcgcatectg cccagatcc cgatggatgg gcatgacctc
60
aaccgggtgt ggcgggacgt cggcctgac gtgcaccgc cgatgctcta catgggctac
120
gtcggtttct ccgtggcctt tgcgtttgcc atcgccgctt tgcctggcgg gcgcctcgat
180
gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcggt cctcggtatc
240
ggtatcacc tcggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtggttc
300
tgggaccccg gggaaaaccc cttcttcatt cctggctgg ggggcacccc gctgattcac
360
tcgctg
366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu Thr Ser Asn Pro Gly Thr Arg Ile Leu Pro Gln Ile Pro Met Asp
1 5 10 15
Gly His Asp Leu Asn Pro Val Trp Arg Asp Val Gly Leu Ile Val His
20 25 30
Pro Pro Met Leu Tyr Met Gly Tyr Val Gly Phe Ser Val Ala Phe Ala
35 40 45
Phe Ala Ile Ala Ala Leu Leu Gly Gly Arg Leu Asp Ala Ala Trp Ala
50 55 60
Arg Trp Ser Arg Pro Trp Thr Ile Val Ala Trp Ala Phe Leu Gly Ile
65 70 75 80
Gly Ile Thr Leu Gly Ser Trp Trp Ala Tyr Tyr Glu Leu Gly Trp Xaa
85 90 95
Gly Trp Trp Phe Trp Asp Pro Gly Glu Asn Pro Phe Phe Met Pro Trp
100 105 110
Leu Gly Gly Thr Pro Leu Ile His Ser Leu
115 120

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggt gccggcaatg
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ggcgcgagct tgagcaagct gctgccgat gtgcacctgg tcaatggcac tgccgagggc
120
attccactgg aaagcgccgt ggcggatgcg gtggtgtgcy cacaagcctt ccattggttt
180
tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
240

ctggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaatac
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgga agccttcact
 360
 ggcgagtatt ttg
 374

<210> 1250

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1250

Thr	Arg	Val	Leu	Asn	Thr	Leu	Ala	Pro	Thr	Leu	Ile	Ala	Val	Glu	Pro
1				5				10					15		
Val	Pro	Ala	Met	Gly	Ala	Gln	Leu	Ser	Lys	Leu	Leu	Pro	Asp	Val	His
		20					25					30			
Leu	Val	Asn	Gly	Thr	Ala	Glu	Ala	Ile	Pro	Leu	Glu	Ser	Ala	Val	Ala
	35					40					45				
Asp	Ala	Val	Val	Cys	Ala	Gln	Ala	Phe	His	Trp	Phe	Ser	Ser	Glu	Ala
	50				55			60							
Ala	Leu	Ala	Glu	Ile	His	Arg	Val	Leu	Lys	Pro	Asp	Gly	Arg	Leu	Gly
65				70				75				80			
Leu	Val	Trp	Asn	Val	Arg	Asp	Glu	Ser	Val	Asp	Trp	Val	Ala	Ala	Ile
			85				90					95			
Thr	Gln	Ile	Ile	Thr	Pro	Tyr	Glu	Gly	Asp	Thr	Pro	Arg	Phe	His	Thr
	100						105					110			
Gly	Arg	Trp	Arg	Glu	Ala	Phe	Thr	Gly	Glu	Tyr	Phe				
	115						120								

<210> 1251

<211> 742

<212> DNA

<213> Homo sapiens

<400> 1251

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 gcggaggcgg cagcacgtgg gagcgacggg cgcccaggc gcgcagttgg gcgcctcctt
 120
 ccctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgctcca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggctacaac gtcacacgc cctttctctt gctcaagctc atcgagcgg
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctggtgggt gactctgtca accaccgct gctcttcagt ggctaccage
 480
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc
 600
 ccttcttctc cctcctcttc atgtacttca gcggtctctn ttactgcttc taaagctgag
 660
 agcttgattc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtag
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1			5					10					15		
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20					25					30		
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
		35					40					45			
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser
	50					55				60					
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65					70					75					80

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
 60
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattgaa
 240
 acagtctgtg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaaccatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcttagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtcctcaa
 480
 ccaccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaaccct ttttccagag gcagccggac tcgtgcgagc
 600
 cttcctgttg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
ncgccgatta ccaaggctat ggatgtgtgg gccttgggcg taacgtata ctgtctgctg
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ttcggctcgag tgccatttga tgcagagacg gactacttgc tgctggaaag taccctgcat
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcatgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gagtcattgt aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcgttac aaggcccgcg g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

35 40 45
 Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
 50 55 60
 Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
 65 70 75 80
 Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
 85 90 95
 Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
 100 105 110
 Trp

<210> 1257

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1257

cgcgtacagc tgattgaagg tgatgtcgcc aacgccgacc tggaggcgca agccgccatc
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 ggccgccacgg cgggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
 120
 ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
 180
 aaggccggtg tgaagcgtgt ggtatttgct tccagcgttg cgggtgtatgg caacaatggc
 240
 gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
 294

<210> 1258

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1258

Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
 1 5 10 15
 Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
 20 25 30
 Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
 35 40 45
 Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
 50 55 60
 Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
 65 70 75 80
 Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
 85 90 95
 Tyr Ala

<210> 1259

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1259

nnacactcta gcctctgact caaggaagct gccagggc ttgcccttcg gtttgggggg
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atcccgctctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcggtggc
120
ctcacggtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
180
agcgtgggtgg acgtggctaa gggagtggc cagggaggcc tggacaccac tcggtctgca
240
cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
300
ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg
360
gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgta ca ggccggc
417

<210> 1260

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1260

Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
1 5 10 15
Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
20 25 30
Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
35 40 45
Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
50 55 60
Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
65 70 75 80
Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
85 90 95
Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
100 105 110
Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
115 120 125
Pro Val Gln Ala Gly
130

<210> 1261

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1261

ngtcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
60
ctggtcggcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
120tgaccctggc ggctcggtgg tggatcgaca acaaggtcag cgcccgcctg 180
ggcaaaactgg taggcctgca caacgccgac ctggcactgc aaggctttat cagcaccttg
240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
 300
 accacctcgt tcgtcgcgga catcggtgct
 330

<210> 1262

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1262

Xaa Ala Arg Ala Val Arg His Gln Glu Met Asn Met Asp Leu Asn Ala
 1 5 10 15
 Glu Val Asp Gln Leu Val Arg Gln Ser Gln Thr Trp Ile Pro Leu Ile
 20 25 30
 Met Glu Tyr Gly Ser Arg Leu Leu Leu Ala Leu Leu Thr Leu Ala Val
 35 40 45
 Gly Trp Trp Ile Asp Asn Lys Val Ser Ala Arg Leu Gly Lys Leu Val
 50 55 60
 Gly Leu Arg Asn Ala Asp Leu Ala Leu Gln Gly Phe Ile Ser Thr Leu
 65 70 75 80
 Ser Asn Ile Gly Leu Lys Val Leu Leu Phe Val Ser Val Ala Ser Met
 85 90 95
 Ile Gly Ile Glu Thr Thr Ser Phe Val Ala Asp Ile Gly Ala
 100 105 110

<210> 1263

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1263

acgcgtggac gatggacttc gtcggctctgc ggtacgacga agggctcaac attgccggtg
 60
 gcatcgatga tgagtttgct cgctctgggca acacctagca gcaatggcat cgatagtccc
 120
 tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac
 180
 gtcaacagac cgtcaccgtg gttgacgatc tcgccggtgg aggcgtcctt gacgacgatc
 240
 tggccacgcy ccaggggaata catctcccca tccacccaaa agaacgcccc caagctgggc
 300
 atcttgacca gcccgatgat cgagagggtt tcaacaagcg actcgggatc c
 351

<210> 1264

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1264

Met Pro Ser Leu Gly Ala Phe Phe Trp Val Asp Gly Glu Met Tyr Ser
 1 5 10 15
 Leu Ala Arg Gly Gln Ile Val Val Lys Asp Ala Ser Thr Gly Glu Ile

```

      20      25      30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
      35      40      45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
      50      55      60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
65      70      75      80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
      85      90      95
His Arg Pro Arg
      100

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<210> 1265
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgctgcg ctccagctcg tgaatcgaaa
60
gttggataac gtcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gcctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

```

<210> 1266
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1      5      10      15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
      20      25      30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
      35      40      45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
50      55      60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
65      70      75      80
Asp Met Pro Leu Thr Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
      85      90      95
Ser Arg Arg

```

<210> 1267
 <211> 343

<212> DNA

<213> Homo sapiens

<400> 1267

nggacatttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg
 60
 ggaactgtcc cacggcccgt gtttctgtgc gctgcagac actcgtggga aatgccccac
 120
 aacctgtgtt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
 180
 tattccccct gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
 240
 gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttggtgcag
 300
 catggtagga agagcaccaa gtcctggact ctgttgattt ata
 343

<210> 1268

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1268

Met	Pro	His	Ser	Leu	Cys	Phe	Tyr	Ser	Pro	Cys	Glu	His	Leu	Trp	Glu
1				5					10					15	
Leu	Ser	His	Gly	Pro	Cys	Phe	Cys	Ala	Pro	Ala	Asp	Thr	Arg	Gly	Lys
			20					25					30		
Cys	Pro	Thr	Thr	Cys	Val	Phe	Val	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
			35				40					45			
Cys	Pro	Thr	Thr	Cys	Val	Phe	Ile	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
			50			55					60				
Cys	Pro	Met	Ala	Arg	Val	Ser	Val	His	Leu	Arg	Ile	Leu	Ile	Lys	His
65					70					75				80	
Gln	Ala	Val	Ile	Gly	Asp	Arg	Val	Ser	Ser	Gly	Cys	Trp	Cys	Ser	Met
				85					90					95	
Val	Gly	Arg	Ala	Pro	Ser	Pro	Gly	Leu	Cys						
			100					105							

<210> 1269

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1269

tcgcatccg gagcatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
 60
 ggacgcgcgac ctggagccgg ccgcctaga cgggctgac gtccaggtgg ggtccccccg
 120
 cggcgccggac tacgacaccg tgtccgaaac ctttggctct tcgccacaat tctgcagcca
 180
 gacctggggc gcacggccgg ttcaccgcaa cggatgatcct ggcagcggcc atggcgggtg
 240
 ccagcgcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
 300

ggttgggtga ggcggacaat ccctttcatc atgagcaatt ccgggagaat ggcgggccgc
 360
 acggggaaga gggttggatc ggcatggcct c
 391

<210> 1270

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1270

Met	Met	Lys	Gly	Ile	Val	Arg	Leu	Thr	Gln	Pro	Pro	Glu	Val	Arg	Ile
1				5					10				15		
Leu	His	Ala	His	Glu	Ala	Ser	His	Pro	Pro	Arg	Glu	Ala	Ala	Gly	His
		20						25				30			
Arg	His	Gly	Arg	Cys	Gln	Asp	His	Arg	Cys	Gly	Glu	Pro	Ala	Val	Arg
	35					40					45				
Pro	Arg	Ser	Gly	Cys	Arg	Ile	Val	Ala	Lys	Asp	Gln	Arg	Phe	Arg	Thr
	50				55					60					
Arg	Cys	Arg	Ser	Pro	Arg	Arg	Gly	Gly	Thr	Pro	Pro	Gly	Arg	Ser	Ala
65				70					75					80	
Arg	Leu	Gly	Arg	Pro	Ala	Pro	Gly	Arg	Arg	Pro	Ala	Met	Arg	Pro	Ala
			85					90					95		
Gly	Arg	Arg	Gln	Pro	Ser	Ala	Ala	Pro	Ile	Ala	Pro	Asp	Arg		
			100					105					110		

<210> 1271

<211> 661

<212> DNA

<213> Homo sapiens

<400> 1271

acgcgtcggtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga
 60
 accagaaagc gtcacgggg tggtagacga gaacgggcga tgttggtgtg ggacggataa
 120
 cccccggttg cgtcaccata tggcccacta aagagttcac cagggttgat ttaccagccc
 180
 cggtcgaccc tctaccacc gccagaagcg gcgcacatcaat agtctctaag cgcggcaaaa
 240
 tatagtcggtt aagctgggta gcgatgcgtc gtgccagccc ggcttgagta atagcctccg
 300
 gcaaatecaa ggggaactgg gcctgacgca ggttggtgccg cagatcggtc aacgacagca
 360
 gtatctgctc agtgttcacg gtgaccttc ctggtcactc gtcaggcctg tggcggcgcc
 420
 cactgcaact cgttgttgac cggctgggtg cgacgtcgct tgaggaatgc gggcagtcctc
 480
 ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata
 540
 cggttgatga gctcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg
 660

t
661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

Met	Asn	Thr	Glu	Gln	Ile	Leu	Leu	Ser	Leu	Thr	Asp	Leu	Arg	His	Asn
1				5					10					15	
Leu	Arg	Gln	Ala	Gln	Phe	Pro	Leu	Asp	Leu	Pro	Glu	Ala	Ile	Thr	Gln
		20						25					30		
Ala	Gly	Leu	Ala	Arg	Arg	Ile	Ala	Asn	Gln	Leu	Asn	Asp	Tyr	Ile	Leu
	35					40						45			
Pro	Arg	Leu	Glu	Thr	Ile	Asp	Ala	Pro	Leu	Leu	Ala	Val	Val	Gly	Gly
	50					55					60				
Ser	Thr	Gly	Ala	Gly	Lys	Ser	Thr	Leu	Val	Asn	Ser	Leu	Val	Gly	His
65					70					75				80	
Met	Val	Thr	Gln	Pro	Gly	Val	Ile	Arg	Pro	Thr	Thr	Thr	Ser	Pro	Val
				85					90					95	
Leu	Val	His	His	Pro	Asp	Asp	Ala	Phe	Trp	Phe	Asp	Gly	Asp	Arg	Val
		100					105					110			
Leu	Pro	Thr	Leu	Val	Arg	Ser	Gln	Val	Ala	Ser	Asn	Asp	Ala		
	115						120					125			

<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattgggtt gctgctcggc
60
gacaaggctg acaactggatt ggtccggcat ggctgcgac gtgccgtcgt cgaagccgtt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttgagg gaacagtcga ggatgggtgag
180
gttatctgcg ctcgacacat cagcagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcgtt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga ggttggtcga cgcagcgcgg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggctggagtt tcgtgctgca
420
tcccagcgtc ttcagcgcct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg
480
cttacgcgt
489

<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1 5 10 15
 Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
 20 25 30
 Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
 35 40 45
 Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
 50 55 60
 Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
 65 70 75 80
 Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
 85 90 95
 His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
 100 105 110
 Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
 115 120 125
 Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
 130 135 140
 Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
 145 150 155 160
 Leu Thr Arg

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggaggc tgaacttctc
 60
 gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
 120
 cccgaggatg caggggtgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
 180
 ggcaaggctg atctaattgga taaactcaat caggagatac ttgcctggc aaacgaattc
 240
 ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
 300
 ggcaatcaga aatcagegtt cagcaggctg actcccgggtg aacgtctcag gctgcgcatt
 360
 gctacagcca tcgcgttggt acgc
 384

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu


```

1           5           10           15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20           25           30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35           40           45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50           55           60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
      65           70           75           80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85           90           95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100          105          110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115          120          125

```

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggctt tcctcagctc tgttctgcct tctctccctg ccattcccacc cacaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccattcccagg gattagcgaa gaaaaatata
180
aagtctcctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttgaacg tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
1           5           10           15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20           25           30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35           40           45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50           55           60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
      65           70           75           80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu
 100 105 110
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln
 115 120 125
 His Asp
 130

<210> 1279
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1279
 atggagtcgc agactctccg ccacatgatac gaggacgact gcgcccacaa cggcatccca
 60
 ctccccaacg tcaactccag gatcctctct aaggtcatcg agtactgcaa cagtcacgtc
 120
 cacgcgcgcg ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
 180
 tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc
 240
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
 297

<210> 1280
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 1280
 Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1 5 10 15
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
 20 25 30
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Lys Pro Ala Asp
 35 40 45
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
 50 55 60
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
 65 70 75 80
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
 85 90 95
 Ala Asp Met

<210> 1281
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 1281
 acgcgtgaag ggggctttgg aggggatggc ttctggactg cagatgggt gaacacagtt
 60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg
 120
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccttccccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag
 240
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggt ccactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcacac
 420
 gtggggaatc taccggctta attttcttctt agtaacaggc atagtaggat caaaaaattt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1282

Met	Gly	Glu	His	Ser	Phe	Leu	Asn	Ser	Phe	Pro	His	Leu	Tyr	Arg	Phe
1				5					10					15	
Glu	Asn	Tyr	Gln	Gln	Leu	Met	Gly	Arg	Val	Ala	Cys	Gln	Val	Met	Ala
			20					25					30		
Ala	Trp	Ser	Pro	Ser	Glu	Glu	Gly	Arg	Leu	Asn	Arg	Gly	Arg	Pro	Pro
		35					40					45			
His	Tyr	Gln	Val	Gly	Thr	Ala	Gly	Arg	Ser	Arg	His	Pro	His	Pro	Lys
	50					55				60					
Glu	Val	Gln	Asn	Arg	Gln	Gln	Glu	Glu	Pro	Asp	Ser	Asn	Arg	Val	Gly
65					70					75				80	
Val	Ile	Arg	Arg	Ile	Ala	Lys	Asp	Val	Thr	Thr	His	Gln	Leu	Trp	Glu
			85					90					95		
Pro	Lys	Gly	Val	Cys	Gly	Pro	Leu	Lys	Gly	Lys	Met	Ile	Gln	Lys	Leu
			100					105					110		
Cys	Ser	Leu	Pro	Leu	Leu	Leu	Lys	Asn	Thr	Gly	Val	Thr	Arg	Gly	Glu
		115					120					125			
Ser	Thr	Gly	Leu	Ile	Ser	Ser									
	130					135									

<210> 1283

<211> 296

<212> DNA

<213> Homo sapiens

<400> 1283

gaattcctca caatgaactg cagtgtcttg aggaccagtt gggtagcctt actccgggtc
 60
 tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatccccgc tggggctctt aggagggagg aaagtccca caggtaactc actggttaat
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn
 296

<210> 1284

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1284

Met	Asn	Cys	Ser	Val	Trp	Arg	Thr	Ser	Trp	Val	Ala	Leu	Leu	Arg	Val
1				5				10					15		
Ser	Thr	Ala	Glu	Leu	Ile	His	Ile	Cys	Phe	Val	His	Thr	Lys	Lys	Asn
		20						25					30		
Ser	Ser	Pro	Lys	Glu	Ser	Arg	Leu	Gly	Leu	Leu	Gly	Gly	Arg	Lys	Val
		35					40					45			
Pro	Thr	Gly	Asn	Ser	Leu	Val	Asn	Phe	Lys	Glu	Leu	Arg	Lys	Gly	Arg
	50					55				60					
Lys	Asp	Gly	Phe	Phe	Ser	Cys	Glu	Ser	Arg	Gln	Gly	Pro	Asp	Asp	Asn
65					70					75				80	
Pro	Pro	Arg	Ser	Glu	Arg	Asn	Phe	Gln	Pro	Thr	Ser	Ala	Ala		
				85						90					

<210> 1285

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1285

gggccccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
 60
 gtgaaaggtc catctagagg aggtaaaaga cagggctgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttgccca
 180
 agaagcaaca aaagggattc tacacctcag accaggaggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctcttcc
 300
 aaaccacacac ttcagaggca ggctttaaaa cgcctgactt ctgtcagggc cacaggctgg
 360
 gctgcccacaa gctcctacgg ggctggggga tccgagagag gacttcccac tagtccaaga
 420
 tgtgggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggccctt
 480
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1286

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Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
      20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
      35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
      50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
      65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
      85           90           95
Ser Pro Arg Cys Gly Asp
      100

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<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

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acgcgtgaag gggagaggca gctccaggtg gagggaagtg catgaggaag cagagaggca
60
ggcgacaggg agcgtggctg gggctgggca ggccttcag tttgattgca gcccagaggt
120
caggtgagaa gaaggtacaa caagcaagga agggcccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtt ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

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<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

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Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
      20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
      35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
      50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
      65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
      85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

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100

105

<210> 1289

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1289

acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tggcgcagcg tgtgcatggg
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cacggcgtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
120
cctgcacggg ggaggaggca aggtggcccc tgccctgtggg cacagagccc accttccggg
180
ccagcccgag gcccccttcc cagagccccc tcccaagggg ccataccacc tgcattcccca
240
agatggcggt gggcgctcct ggtgcaggag caggggacag tcagggaggc gtgtggcgga
300
cagtagcagc cccccagccc cctccccccc accggg
336

<210> 1290

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1290

Met	Val	Cys	Glu	Cys	Thr	Arg	Val	Pro	Glu	Ser	Cys	Lys	Leu	Leu	Ala
1				5					10					15	
Glu	Ser	Cys	Thr	Val	Glu	Glu	Ala	Arg	Trp	Pro	Leu	Pro	Val	Gly	Thr
			20					25					30		
Glu	Pro	Thr	Phe	Arg	Ser	Ser	Pro	Arg	Pro	Leu	Ser	Gln	Ser	Pro	Leu
		35					40					45			
Pro	Arg	Gly	His	Thr	Thr	Cys	Ile	Pro	Lys	Met	Ala	Trp	Gly	Val	Pro
	50					55					60				
Gly	Ala	Gly	Ala	Gly	Asp	Ser	Gln	Gly	Gly	Val	Trp	Arg	Thr	Val	Ala
65				70					75					80	
Ala	Pro	Gln	Pro	Pro	Ser	Pro	His	Arg							
					85										

<210> 1291

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1291

tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga
60
atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattccta
120
taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
180
gtaaaccggg tttcccccaa cggataccca tcaactgcat gctcggtttt ttctatccga
240

cgccccagcg ggtcatacac cactctgacc acgtaccat cgtcattacg cacttcaacc
 300
 agccgggttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1292

Met	Val	Glu	Lys	Arg	Ser	Ala	Lys	Arg	Gly	Val	Gln	Arg	Phe	Ala	Tyr
1			5						10					15	
Asp	Ala	Glu	Ser	Arg	Leu	Val	Glu	Val	Arg	Asn	Asp	Asp	Gly	Ser	Val
		20						25					30		
Val	Arg	Met	Val	Tyr	Asp	Pro	Leu	Gly	Arg	Arg	Ile	Glu	Lys	Thr	Glu
		35					40					45			
His	Gly	Ser	Asp	Gly	Tyr	Pro	Leu	Gly	Glu	Thr	Arg	Phe	Thr	Trp	Asp
	50					55					60				
Gly	Leu	Arg	Leu	Leu	Gln	Glu	His	Lys	His	Ser	Gln	Thr	Ser	Leu	Tyr
65					70					75				80	
Val	Tyr	Glu	Asp	Glu	Gly	Tyr	Gln	Pro	Leu	Ala	Arg	Val	Asp	Gly	Ala
			85						90					95	
Gly	Pro	Leu	Gln	Lys	Ile	Arg	Tyr	Tyr	His	Asn	Asp	Leu	Asn	Gly	Leu
		100						105					110		
Pro	Glu	Gln	Leu	Thr	Glu	Val	Asp	Gly							
		115						120							

<210> 1293

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1293

nngccggccg cccgagagct gttcgaggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg
 120
 ctgcacttcg ccgcagggtt tgggcggaaa gacgtagtgg aatatttgct tcagaatggt
 180
 gcaaatgtcc aagcacgtga tgatgggggc cttattcttc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctccttttg cgacatgggt cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgcca
 340

<210> 1294

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1 5 10 15
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20 25 30
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35 40 45
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50 55 60
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65 70 75 80
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85 90 95
 Asn Ala

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

ggatcccgga gacctcgctcg gcgaacgtca cctcgctccag ggccgaggcg cggaacaccg
 60
 acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgaggag
 120
 cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcgggttcg cccgacgcc
 180
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgctcg
 240
 cgagctcttc cttegcccg tcgagccgca ccgtcgcgat ctcgtcgccg gcaccgaagc
 300
 ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
 351

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1 5 10 15
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20 25 30
 Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
 35 40 45
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50 55 60
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65 70 75

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcacccgg attccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga
60
gacacccagg cctcaggccc catgggcaag ctccacgcca cggctcctac cagagggaca
120
gatacactct acaaattctg gggcccacca caccaagaag acacggagga gccacaacaa
180
gaaggaccat acgaaatgca cccccaaagc aaccaaccaa tccaagaaaa aatacgtctc
240
agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctggctcaag
300
caccttacct cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10					15	
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25					30		
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
		35					40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
		50				55					60				
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65					70				75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
				85					90						

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

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60
gttggtggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttctctg
120
tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
180
gagttttctg ggggtgggtc acgggtcttg ccggagttc gccctggcaa aggcctgtgc
240
cagtgatcct ggagcggagc gaagtgttcc cgtgactctg cagccgcagt tcttagggct
300
tccttag
307

<210> 1300
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1300
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1 5 10 15
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
 20 25 30
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
 35 40 45
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
 50 55 60
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
 65 70 75 80
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
 85 90

<210> 1301
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 1301
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
 60
 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
 120
 cgcctatgg tgcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
 180
 atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccggtat
 240
 gtgacttcat ctaatacgac tgcgggcgga ggcgcagcgg gaacagggtt tggtccttg
 300
 tacttagatt atgtattagg taccactaag gcttatacga ctgcggttg ttctggacct
 360
 ttcctactg agttgttga cgaagatggt gagcgtcttg gtacgcgt
 408

<210> 1302
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1302
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1 5 10 15
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
 20 25 30
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
 35 40 45
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50	55	60
Gly Ala Gln Gly Ser Leu Leu Asp Val Asp His Gly Thr Tyr Pro Tyr		
65	70	75
Val Thr Ser Ser Asn Thr Thr Ala Gly Gly Ala Pro Ala Gly Thr Gly		
85	90	95
Phe Gly Pro Leu Tyr Leu Asp Tyr Val Leu Gly Ile Thr Lys Ala Tyr		
100	105	110
Thr Thr Arg Val Gly Ser Gly Pro Phe Pro Thr Glu Leu Phe Asp Glu		
115	120	125
Asp Gly Glu Arg Leu Gly Thr Arg		
130	135	

<210> 1303

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 1303

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gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccgc
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gtttgccctg gggccctctc atcccacatc attttttcaa cccttcccca ncctttcnga
120
aatagggcca accccttaaa aancaaatnt tcanataaac ccttttccct ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgcc aacacacctc accctgcta gcccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattt gcctgggcgt cctgtacttt tcttaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agcccttcc caggctgggt
600
ccctgccgcg atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaag gctgctcagg agacactgca caccttctc tttcttgtct
720
gggggctcaa gaatccagac gccacctcc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgcc agccactgc gaccacaggg ctctgccggg gtctgcccgg aaccagggt
840
tccggtccag aagccaggga taaatgccgc ttctctata gggacggtca gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtct cggggcgggc acgtgggggg
960
cctgacagct ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc
1020
tggatccac gcgtggc
1037

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<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
 Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser
 1 5 10 15
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser
 20 25 30
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
 100 105 110
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
 115 120 125
 Ser His Ala Trp
 130

<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
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 60
 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggctcctggta cgagtttttc
 120
 ccgcgtcttc aggggtctta tgcgatgcg gacggtcact gggtttcagg tactttcgac
 180
 acctcctggg agcgccctgga cgccgcgct gcgatgggat ttgacgttgt ttacctgccc
 240
 gcgatccatc ccatgggcca agccttcgc aagggaagg acaacacct gacccaggt
 300
 ccggacgatc cgggatcgcc gtgggccatc ggatcgctc atggcgggcca tgacaccatt
 360
 caccgccacc taggcacctt cgacgacctc gaccgtttcg tggcccacgc tcatgacct
 420
 ggcatggagg tggccctaga ttttgcttg caagcctcac cagaccacc gtgggtacac
 480
 cagcaccgg agtggttcac gaccgcggt gatggcacca tcgcctatgc agaaaattca
 540
 cccaaaaagt atcaggacat ctaccgatc aacttcgaca atgacctga cggtatctac
 600
 caggaatgct tgcggctgct ggagttatgg atctcccacg gcgtgacgat tttccgcgtc
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt
 720
 cgtcaccccg aggtcatctt cctggcagag gccttcaccc gtcccagat gatca
 775

<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 1306
 Xaa Ala Phe Cys Glu Ala Met Arg Val Tyr Ala Pro Arg Pro Leu Thr
 1 5 10 15
 Ser Pro Thr Leu Pro Ala Pro Leu Arg Val Glu Arg Arg Arg Ala Leu
 20 25 30
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val
 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu
 245 250 255
 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1307
 cggccggtgg ggagtgccaa gccccaggct cctgcatcc cacttctggt gaggtcagtg
 60

atgctgggca catgcggtca gggccctgtg cctgagccgt ggaactccac agccattcca
 120
 catgttcagt cccacaccct gaggccaagg cccccgagt ccctgaggga gcaaggccct
 180
 gccacccgag gctgccgctg cagaggcaaa cagccccgag caaggcccgg caaccccgagg
 240
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg ccggccagtc ggggtggcca
 300
 taggctaacy agaagccagg gcctccctcc ccaactgggtt ttccacaaaa acctgactaa
 360
 tgtccaggga cagccaaagg ccttgagggtc agctgggtgg aacacctttc ccctaccatc
 420
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg
 480
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc
 540
 cctccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gcccaagacc
 600
 tcccccaacc ttggtctgac gcgt
 624

<210> 1308

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1308

Met	Ala	Thr	Pro	Thr	Gly	Arg	Gln	Pro	Gln	Ala	Arg	Leu	Cys	Leu	Pro
1				5				10					15		
His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20				25					30			
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
		35				40					45				
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
		50				55				60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65					70				75				80		
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
				85				90					95		
Ser	Pro	Pro	Ala												
			100												

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

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 60
 taccgtactg tgtgtatcgg caaaaagagc ctgaaatggg tgccgctgtt cggtcagtgt
 120
 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgccgtcca
 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
 240
 ggtacacgca acttcggtga aaccttgctg ccgttcaaga aagggtgcgtt ccagatggcg
 300
 attgccgcag gtgtgccgat cgtgcagggtg tgtgtcagca cgtatgtgaa gcacatgaag
 360
 ctcaatcggt gggacagtgg cgatatttta attcgcctgt tgccgccaat tcctacgacc
 420
 ggactgacgt tggatgacat gccacgggtg atggagacct gccgtcaaca aatgcgcgag
 480
 tgcattgagg caatggaccg cgagctggaa atcgtccctt gtaggaacga attggctcgc
 540
 gaagggcggt aacgactacg cgt
 563

<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

Xaa	Ile	Ile	Ala	Asn	His	Gln	Ser	Asn	Tyr	Asp	Leu	Phe	Val	Phe	Gly
1				5					10					15	
Thr	Gly	Val	Pro	Tyr	Arg	Thr	Val	Cys	Ile	Gly	Lys	Lys	Ser	Leu	Lys
		20						25					30		
Trp	Val	Pro	Leu	Phe	Gly	Gln	Leu	Phe	Trp	Leu	Ala	Gly	Asn	Val	Leu
		35				40						45			
Ile	Asp	Arg	Gly	Asn	Ala	His	Lys	Ala	Arg	Arg	Ser	Met	Leu	Thr	Thr
	50					55					60				
Thr	His	Thr	Leu	Gln	His	Lys	Asp	Thr	Ser	Ile	Trp	Val	Phe	Ala	Glu
65				70					75					80	
Gly	Thr	Arg	Asn	Phe	Gly	Glu	Thr	Leu	Leu	Pro	Phe	Lys	Lys	Gly	Ala
			85					90					95		
Phe	Gln	Met	Ala	Ile	Ala	Ala	Gly	Val	Pro	Ile	Val	Gln	Val	Cys	Val
		100						105					110		
Ser	Thr	Tyr	Val	Lys	His	Met	Lys	Leu	Asn	Arg	Trp	Asp	Ser	Gly	Asp
		115				120						125			
Ile	Leu	Ile	Arg	Ser	Leu	Pro	Pro	Ile	Pro	Thr	Thr	Gly	Leu	Thr	Leu
	130					135						140			
Asp	Asp	Met	Pro	Arg	Leu	Met	Glu	Thr	Cys	Arg	Gln	Gln	Met	Arg	Glu
145				150					155					160	
Cys	Ile	Glu	Ala	Met	Asp	Arg	Glu	Leu	Glu	Ile	Val	Pro	Cys	Arg	Asn
			165					170					175		
Glu	Leu	Ala	Arg	Glu	Gly	Arg									
			180												

<210> 1311

<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

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 60

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<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

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Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
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Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
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Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
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Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85				90						95		
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
		100					105					110			
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
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Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
130					135					140					
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
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Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165				170						175		
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
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<210> 1313
 <211> 367
 <212> DNA
 <213> Homo sapiens

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<210> 1314
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1314
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 35 40 45
 Ser Ser Ser Arg Ala Pro Leu Leu Ala Lys Thr Pro Leu Ser Thr Ser
 50 55 60
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro
 65 70 75 80
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro
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 Ala Thr Trp Arg Gly Cys Met Asp Ile
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<210> 1315
 <211> 5245
 <212> DNA
 <213> Homo sapiens

<400> 1315
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180
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420
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<210> 1316

<211> 856

<212> PRT

<213> Homo sapiens

<400> 1316

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			20				25					30			
Gly	Asn	Thr	Arg	Glu	Ala	Leu	Ser	Pro	Cys	Pro	Ser	Thr	Val	Ser	Thr
	35					40					45				
Lys	Ser	Gln	Pro	Gly	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Gly	Val	Lys	Met
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Thr	Ser	Phe	Ala	Glu	Gln	Lys	Phe	Arg	Lys	Leu	Asn	His	Thr	Asp	Gly
65				70				75				80			
Lys	Ser	Ser	Gly	Ser	Ser	Ser	Gln	Lys	Thr	Thr	Pro	Glu	Gly	Ser	Glu
			85				90					95			
Leu	Asn	Ile	Pro	His	Val	Val	Ala	Trp	Ala	Gln	Ile	Pro	Glu	Glu	Thr
	100						105					110			
Gly	Leu	Pro	Gln	Gly	Arg	Asp	Thr	Thr	Gln	Leu	Leu	Ala	Ser	Glu	Met
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Val	His	Leu	Arg	Met	Lys	Leu	Glu	Glu	Lys	Arg	Arg	Ala	Ile	Glu	Ala
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Gln	Lys	Lys	Lys	Met	Glu	Ala	Ala	Phe	Thr	Lys	Gln	Arg	Gln	Lys	Met
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Gly	Arg	Thr	Ala	Phe	Leu	Thr	Val	Val	Lys	Lys	Lys	Gly	Asp	Gly	Ile
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Ser	Pro	Leu	Arg	Glu	Glu	Ala	Ala	Gly	Ala	Glu	Asp	Glu	Lys	Val	Tyr
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Thr	Asp	Arg	Ala	Lys	Glu	Lys	Glu	Ser	Gln	Lys	Thr	Asp	Gly	Gln	Arg
	195				200						205				
Ser	Lys	Ser	Leu	Ala	Asp	Ile	Lys	Glu	Ser	Met	Glu	Asn	Pro	Gln	Ala
	210				215					220					
Lys	Trp	Leu	Lys	Ser	Pro	Thr	Thr	Pro	Ile	Asp	Pro	Glu	Lys	Gln	Trp
225				230				235						240	
Asn	Leu	Ala	Ser	Pro	Ser	Glu	Glu	Thr	Leu	Asn	Glu	Gly	Glu	Ile	Leu
			245					250					255		
Glu	Tyr	Thr	Lys	Ser	Ile	Glu	Lys	Leu	Asn	Ser	Ser	Leu	His	Phe	Leu
	260						265					270			
Gln	Gln	Glu	Met	Gln	Arg	Leu	Ser	Leu	Gln	Gln	Glu	Met	Leu	Met	Gln

275	280	285
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290	295	300
Gln Lys Gln Ile Arg Asp Phe Lys Pro Ser Lys Gln Ala Gly Leu Ser		
305	310	315
Ser Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro		
325	330	335
Ser Pro Gln Ser Ser Asn Arg Lys Ser Ala Ser Phe Ser Val Lys Ser		
340	345	350
Gln Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg		
355	360	365
Thr Leu Thr Pro Pro Arg Ser Val Asp Ser Leu Pro Arg Leu Arg Arg		
370	375	380
Phe Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe		
385	390	395
Gly Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu		
405	410	415
Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly		
420	425	430
His Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser		
435	440	445
Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn		
450	455	460
Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Pro Lys Pro Val Phe		
465	470	475
Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser		
485	490	495
Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp		
500	505	510
Gly Glu Ser Asp Lys Glu Gln Phe Asp Asp Asp Gln Lys Val Cys Cys		
515	520	525
Gly Phe Phe Phe Lys Asp Asp Gln Lys Ala Glu Asn Asp Met Ala Met		
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545	550	555
Gln Leu Arg Lys Gln Gln Leu Glu Ala Glu Met Glu His Lys Lys Glu		
565	570	575
Glu Thr Arg Arg Lys Thr Glu Glu Glu Arg Gln Lys Lys Glu Asp Glu		
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Arg Ala Arg Arg Glu Phe Ile Arg Gln Glu Tyr Met Arg Arg Lys Gln		
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Leu Lys Leu Met Glu Asp Met Asp Thr Val Ile Lys Pro Arg Pro Gln		
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Val Val Lys Gln Lys Lys Gln Arg Pro Lys Ser Ile His Arg Asp His		
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Ile Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu		
645	650	655
Ser Leu Ala Ser Leu Asn Thr Gly Asp Asn Glu Ser Val His Ser Gly		
660	665	670
Lys Arg Thr Pro Arg Ser Glu Ser Val Glu Gly Phe Leu Ser Pro Ser		
675	680	685
Arg Cys Gly Ser Arg Asn Gly Glu Lys Asp Trp Glu Asn Ala Ser Thr		
690	695	700
Thr Ser Ser Val Ala Ser Gly Thr Glu Tyr Thr Gly Pro Lys Leu Tyr		

705 710 715 720
 Lys Glu Pro Ser Ala Lys Ser Asn Lys His Ile Ile Gln Asn Ala Leu
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 740 745 750
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 755 760 765
 Phe Arg Asp Ser Gly Cys Gln Phe Arg Ser Leu Tyr Thr Tyr Cys Pro
 770 775 780
 Glu Thr Glu Glu Ile Asn Lys Leu Thr Gly Ile Gly Pro Lys Ser Ile
 785 790 795 800
 Thr Lys Lys Met Ile Glu Gly Leu Tyr Lys Tyr Asn Ser Asp Arg Lys
 805 810 815
 Gln Phe Ser His Ile Pro Ala Lys Thr Leu Ser Ala Ser Val Asp Ala
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<210> 1317

<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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<210> 1318

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

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			20					25					30		
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		35					40					45			
Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
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Leu	Cys	Leu	Leu	Lys	Lys	Glu	Glu	Lys	Glu	Glu	Pro	Val	Ala	Pro	Glu
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Leu	Ala	Thr	Thr	Val	Pro	Glu	Ser	Ala	Glu	Pro	Glu	Ala	Glu	Ala	Asp
			85						90					95	
Gly	Glu	Glu	Leu	Asp	Gly	Ser	Asp	Met	Ser	Ala	Ile	Ile	Tyr	Glu	Ile
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Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met
	115						120					125			
Asp	Ala	Asp	Gly	Leu	Leu	Glu	Met	Phe	His	Cys	Pro	Tyr	Glu	Gly	Cys
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Ser	Gln	Val	Tyr	Val	Ala	Leu	Ser	Ser	Phe	Gln	Asn	His	Val	Asn	Leu
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Val	His	Arg	Lys	Gly	Lys	Thr	Lys	Val	Cys	Pro	His	Pro	Gly	Cys	Gly
			165						170					175	
Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
		180						185				190			
Ser	Gly	Val	Arg	Glu	Phe	Thr	Cys	Glu	Thr	Cys	Gly	Lys	Ser	Phe	Lys
	195					200					205				
Arg	Lys	Asn	His	Leu	Glu	Val	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Thr
	210					215					220				
Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
225				230						235				240	
Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
			245					250						255	
Thr	Cys	Asp	Ala	Cys	Gly	Lys	Arg	Phe	Glu	Lys	Leu	Asp	Ser	Val	Lys
		260						265				270			
Phe	His	Thr	Leu	Lys	Ser	His	Pro	Asp	His	Lys	Pro	Thr			
	275						280					285			

<210> 1319
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 1319
 cgaggagcgga gccagctct tggctggtga tgagggcctg gaagcagatg gcctctcagt
 60
 cctccatttg ggaggactcc caaaatagtg caggctcgag ggggtgggga atggctcctg
 120
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttctctt gggagctccg tgggagagtg
 180
 gagtcatgac caagtcagag agcagttggg gaggaaccca gaagccctgg gatgggtgtct
 240
 gcatgggaat gtgtagggag gcagccacaa tgggcctggg ccttcctttc tctccttctt
 300
 gtccccctcc cccatcccc tctctcctcc ctctcttctg gaaacccagt actgggggaa
 360
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag
 420
 tttgcctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcatat
 480
 gtatggttgt gtgtgcatgg ggggtgggga ttctgacctg gggtcactcc caaagctt
 538

<210> 1320
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1320
 Met Arg Ala Trp Lys Gln Met Ala Ser Gln Ser Ser Ile Trp Glu Asp
 1 5 10 15
 Ser Gln Asn Ser Ala Gly Ser Arg Gly Trp Gly Met Ala Pro Ala Glu
 20 25 30
 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp
 35 40 45
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln
 50 55 60
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr
 65 70 75 80
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser
 85 90 95
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr
 100 105 110
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala
 115 120 125
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val
 130 135 140
 Val Leu Cys Val Cys Ile Cys Met Val Val Cys Ala Trp Gly Trp Gly
 145 150 155 160
 Ile Leu Thr Trp Gly His Ser Gln Ser
 165

<210> 1321

<211> 1292

<212> DNA

<213> Homo sapiens

<400> 1321

nacgcgtacc gtcgctgac tccccctgg tcgtgaccaa cgcggccggg ttcacatct
60
cggaacgcag caatgatccg gcgtcagtgc tctcagtcac cgcaggatga cccggtgcaa
120
cgcccgatc gctcacggtg cgcaacgacg aagcagggat cgctcagacc cgggcacgtc
180
atcgtcaaga agatttataa caacaatgtc cttctcggcg tcaacggttc ggggaccgaa
240
atggtcgtca atgctcgcgg tatcgcctac ggacgacacc gcggggagat cgtcgtgccc
300
tcgtcggccc agcgatatgt cgcagagggt gcctatcgca cgaccgccat cgcactactg
360
ctaacgaacg ccaactcacac cgaggtgcca gtggcacagg caatcgtcga attggcgcgc
420
gaagagctgg gcaactccca tgcccgacgg atgatgctgc ccacccctga tcacccctgc
480
gcagctgtgc accgagctaa gcagggggcc gtcacgatt tccccctgga atgggaagtc
540
cgtcagctct atcccgatga ggcggaactg ggccgacgcg ctgtcgaat cgtcgcggt
600
gtctcgaata tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat
660
cagcgggtgg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac
720
gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca
780
tcccgttcg tcacccacct tcgctatctg ttcgctcggg cctcggacaa caagcagtc
840
tctcacgttg acctggacat tgtgggactc atgtcagatc gctaccaga agccacattg
900
gcagctagcc aagtggccga gcacatctg aaagcaatcg gcaacgacct gacggaagcc
960
gaaatcaact acatgcctt acacaccacc cggctctaca acgaggtgat ggggatggat
1020
gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat
1080
gaccttctg ccggaagcc agcaccaaag tcaccagat caaaattcag atgcgtgct
1140
aattccacc ccgacatcca agaggtcagg ggggggtgtg tgggggtggg ggggtggggg
1200
gggggggttt gcatgctcag ggggtggggc tttgttgaag ccacatgaa gttgcaaacc
1260
caggactgtt ccactagtaa agcccctgcc tt
1292

<210> 1322

<211> 317

<212> PRT

<213> Homo sapiens

<400> 1322

```

Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
      50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
      65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
      145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
      225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
      305          310          315

```

<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

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cgcgatgatgg gaatgcgtca ctatgatgtt cagttgattg gtggtatcac tctgcacgaa
60
ggcaaaattg ctgagatgcg tacaggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

```

tacctcaatg cattgagtgg tcagggtgtg catgtcatca ccgtcaatga ctatcttgca
 180
 caacgtgatg ctgaactcaa ccgcccatta tttgagtttt tgggtttaag catcggtgtg
 240
 atttattcga tgcaaagcc tgctgagaaa gcacaagctt atttagcaga cattaacttac
 300
 ggtacc
 306

<210> 1324
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1324
 Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile
 1 5 10 15
 Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys
 20 25 30
 Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln
 35 40 45
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala
 50 55 60
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val
 65 70 75 80
 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala
 85 90 95
 Asp Ile Thr Tyr Gly Thr
 100

<210> 1325
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1325
 gtgcacatgg gccactggc gaatccgacg cgcggcctac ggcgcgcaat actggcgggc
 60
 attgtcgccg catgttcctg ctccgctcat gccggaagct ggccagagaa accgatcacg
 120
 atggctcgtgc cgtttcccgc cggaggcggc accgatctcg tggcgcgctc gatccagccg
 180
 cttttgcagc gcgaactcgg acaaccggtg gtgatcgaca accgcagcgg cgcaggcggc
 240
 acgctcggct ccagcttcgt ggcgcgggcc gttgccgacg gctacacggc tggcgtggtc
 300
 accacgagca cccacgcggt aagcgtcggc ctctatcccc ggtgggcta caaccgaca
 360
 gcggactttg catacgccgg cttcatcggc n
 391

<210> 1326
 <211> 130
 <212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
      20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
      35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
      50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
      65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
      85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
      100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
      115          120          125
Ile Gly
      130

```

<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

```

nnacgcgtga ttccggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
60
tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaatagagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcatcgaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
      20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
      35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

50		55		60
Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala				
65	70	75	80	
Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg				
	85	90	95	
Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly				
100	105			

<210> 1329

<211> 438

<212> DNA

<213> Homo sapiens

<400> 1329

```

ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc
60
ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc
120
cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc
180
tctgcaatgc aagctgggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
240
gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgca
300
ggtgagggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
360
cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
420
ggtcgtcagt tgacgcgt
438

```

<210> 1330

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1330

Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser				
1	5	10	15	
Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val				
	20	25	30	
Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu				
	35	40	45	
Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln				
	50	55	60	
Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr				
65	70	75	80	
Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg				
	85	90	95	
Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro				
	100	105	110	
Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu				
	115	120	125	
Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu				

130 135 140
 Thr Arg
 145
 <210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens
 <400> 1331
 gcgtaccgct ccgcggaact ggtgatgatg accgaggcac cgggatgcgg aatccccctgg
 60
 catcttcttg ccggcatcgg acgcacgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcggtgggta cgaacgtcac cccgatcttc ggccccatcc tcgacggacg gctggcaggc
 180
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gacccactca cgaccgcgcc
 240
 gtcggggcca tgcagttcat tccggccacc tgggcccgat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaacgtg atc
 453

<210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1333

acgcgtcgcc cacactgttg ccgccgaggc ggctcgagcc ggggtgtgagg aaggatccgc
 60
 ggcacagctc gtcgggtcaag atgggtctag tgctgctcgt atggcggcgg aggcacccgc
 120
 gcgaagggct aaagcggatg gactaagcca gcttgctatc gatgtcaatg gagacgccgt
 180
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggc cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccgga agaaccgca gcagcgttct
 360
 ctcaatcaga tcgtcgacat cctgcacat ggcggtctta tcgcctaccc gacagacacg
 420
 gggtatgcct tcggtgcccg gntaggaat aaggatgccg tggaccggat tcgcaaactt
 480
 cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcaggttggc
 540

<210> 1334

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1334

Val	His	Pro	Glu	Asn	Pro	Gln	Gln	Arg	Ser	Leu	Asn	Gln	Ile	Val	Asp
1			5					10					15		
Ile	Leu	His	His	Gly	Gly	Leu	Ile	Ala	Tyr	Pro	Thr	Asp	Thr	Gly	Tyr
		20						25					30		
Ala	Phe	Gly	Ala	Arg	Xaa	Gly	Asn	Lys	Asp	Ala	Val	Asp	Arg	Ile	Arg
		35					40					45			
Lys	Leu	Arg	Gln	Leu	Phe	Asp	Lys	His	His	Phe	Thr	Leu	Val	Met	Ser
	50					55					60				
Gln	Phe	Ala	Gln	Val	Gly										
65					70										

<210> 1335

<211> 748

<212> DNA

<213> Homo sapiens

<400> 1335

nctctcatatc tttttttccc tattcctatc cccctctct cgcaccgcgt gaagcgttct
 60
 gtgaatgccca agaagaagcg tcgtgaggtc ctgcacagg cctccgggta ccgtgggtcag
 120
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcgccac ttattcggtc
 180

cgtgaccgtc gtgctaagaa gggtagcttc cgtcgtctgt ggatccagcg catcaatgct
 240
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgtggc
 300
 gtcgaggtcg accgcaagat gtcgctgag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgctg
 480
 ttcggcccgt cgtctttcat ctccgctggg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggcaac
 600
 ctccgaccca gtcgctgatg ctgagcatgt cgaggtggct acatgtcgtg gcgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
 720
 cttcgcggtg tgcggcagg ttacgcgt
 748

<210> 1336

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1				5					10					15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp
			20					25				30			
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
	35					40					45				
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
	50				55					60					
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
65				70					75				80		
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
			85					90					95		
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
	100						105				110				
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
	115				120						125				
Ser	Gln	Pro	Gln	Asn	Ala	Ala	Ala								
	130				135										

<210> 1337

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1337

acgcgtgagg ccaggccact gggcaccgcc gttagccagg gcagcctcct tcagtggtea
 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gcctcttgcc tcatgggtcag tgtgggtcag tgctttcgct gtatgagact acagggtttc
 180
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gccc
 364

<210> 1338
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1338
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala
 1 5 10 15
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu
 20 25 30
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu
 35 40 45
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu
 50 55 60
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr
 65 70 75 80
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala
 85 90 95

<210> 1339
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 1339
 cgcgttgtct tcaacatcga cgaaaagcag tgcattgacc tggcgcaccg tggtagtgag
 60
 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
 120
 ccggagatgt ttageccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggccgtgag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcaeg tgtgcgtctc tttgcacccg cacaatgata gtggcacggc gatcggggcc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagegcccgg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccagggagtt
 480

gacgccggta tgcattcttc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgtctgccag taccggcccc ccagccctac tccggcgatc tggctttcac cgccttctcc
 600
 ggttcccacc aggacgccat caagaagggt ctggaagacc tggcccggcg cgc
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1			5					10					15		
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
		35					40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
	50					55					60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65					70					75				80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
			85						90					95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100					105					110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly
		115					120					125			
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
		130				135					140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145					150					155				160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
			165						170					175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
			180					185					190		
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
		195					200					205			
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
		210				215									

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

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 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccgggtggt taatggatca
 420
 caagcccagag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgtcgtcgct gccactccc caggatacct cgtaagcga caaacagagg atgtgcagat
 540
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggt ctgttggtga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
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His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
		35				40					45				
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50				55					60					
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65				70					75					80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
			85					90						95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
	115					120						125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130					135					140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145				150					155					160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
			165					170					175		
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180				185					190			
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
		195					200					205			
Leu															

<210> 1343
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 1343
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 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt
 120
 ttaaaatttt tctcaagtgc caatcagaat tgtttgaaaa cagcaggaaa cccaagggac
 180
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1344
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
 1 5 10 15
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1345
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 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac
 120
 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtctc acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgtctg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgccatt gc
402

<210> 1346

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1346

Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
1 5 10 15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
20 25 30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
35 40 45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
50 55 60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
65 70 75 80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
85 90 95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
100 105 110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
115 120 125
Ser Cys Ile Ala His Cys
130

<210> 1347

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1347

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tagggcgagg gaaccagct aggggctggg gataaaaaat aagaaataac tgaaggacct
120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgccg aaattgctg aggcagggga aggggcacgc tttctgaaaa
240
accccccaa accgattcca ggaagcccaa agggcgccc ctctgccgc agcactgcct
300
tcaagtttac ttccatcccg gctctctct tcccctaagg cttggcatgc aacatccctg
360
cttctcacc accctttatt taagactcct attatctgca cacaatggaa gtttag
415

<210> 1348

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1           5           10           15
Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
 100           105

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<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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gctcagacgg tcatgcgttc gatcgccgaa aagcttggcc ttccggtcat cgtaagccg
 120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttctcag
 180
gccgtcgcca acgctatgc ctatgacgac atggtttag tagaggaatt cattgtgggc
 240
aacgaactcg caataggcat gatcagcagc tctgaaggca cgcgtgtgct gccagccgc
 300
gagattcgcc ctgtcggtag tgtttatgat tattcagcga tgtacaccg tggtagagaca
 360
cgactaacag ctctgcaga cattagcgat acggcggccc aaaccgcgac ggcatggcc
 420
cgagtcgtgc aaaaggagct cgatttctcc gggatatctc gtgtcgatgc gatcgtggac
 480
gagtcgggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
 540
ctcgtaccg tggtatgaa agctgccggt ctagacctg gcgaggtgtg ctctcgacta
 600
gtcgtgacg tcgctcgcaa ccatggctga cagtgtgcac acgaggggct cgcgccacgc
 660
cgtgcgcgtc aagcaggcat ctgtcgtctt gctcggcgtc gtccttgcca gtgtgatggt
 720
cttctcgga ctgtggcaga tgaacgtttt tgagtcctaa cgtgacgact cgacgcaggc
 780
gcgtatcaac gagccagtga tcacctggaa tgaggcgctt aagaaggcca gtgtcatggc
 840
tcagtacgga cgccgggtga cggtagcggg caggttccaa ccgtcgacca caaccttgat
 900
aggcacatcg tggccagtac gcgt
 924

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<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1350
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 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu
 20 25 30
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly
 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 1351
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 gacgagacgc aaaacgcatt gcttctcagt attctgctgc accccgggtct gctcatcgtc
 120
 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tegtgtgggg
 180
 gcccgacgg acgcatcggc cctctttctc tgaaccgccc tgtttgcttc gctgctccag
 240
 ttcaagcaca tttaagtata cgtcgcgccg gcgtactttg tgtacctgct gcgtgcgtac
 300
 atgctcccga gcatgccgac gtccgcatcg acggggagcg cggcgatcga tcgcaccatc
 360

aagcttggcg cagcgacgct ggtgccttcc tgctgagc
398

<210> 1352

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1352

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Cys	Thr	Met	Gly	Asp	Glu	Thr	Gln	Asn	Ala	Leu	Leu	Leu	Ser	Ile	Leu
			20				25					30			
Leu	His	Pro	Gly	Leu	Leu	Ile	Val	Asp	His	Ile	His	Phe	Gln	Tyr	Asn
		35				40					45				
Gly	Phe	Leu	Ile	Arg	Gly	Pro	Leu	Tyr	Arg	Leu	Gly	Ala	Arg	Thr	Asp
		50				55					60				
Ala	Ser	Ala	Leu	Phe	Leu										
65					70										

<210> 1353

<211> 480

<212> DNA

<213> Homo sapiens

<400> 1353

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accctcacac ccacccacc cccagtcaca cggatcgtgc ggggcattgg acagcctcgg
120
ggcaacatgc tcttggtggg tategggggc agcggacgcc agagtctggc ccgcctggct
180
tcattccatct gcgactacac caccttcag atcgaggtca ccaaacatta tcggaagcag
240
gagttccgag atgatataaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg
300
tccttcattt ttgtggacac ccaaatacgt gatgagtcct tcctagagga catcaacaac
360
atcctcagct caggcgaggt gcccacattt ttcaggcctg atgaatttga agagatccag
420
tcgcataatca tagaccaggc ccgggtggag cagggtgcctg agtcacggga cagcctcttc
480

<210> 1354

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1354

Xaa	Ala	Pro	Ile	Pro	Ser	Leu	Gly	Pro	Gly	Gly	Pro	Leu	Ser	Leu	Leu
1				5				10				15			
Ser	Gln	Leu	Ile	Thr	Leu	Thr	Pro	Thr	Pro	Pro	Pro	Val	Thr	Arg	Ile
		20				25					30				
Val	Arg	Gly	Ile	Gly	Gln	Pro	Arg	Gly	Asn	Met	Leu	Leu	Val	Gly	Ile

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<400> 1355
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120
ggccctgtga gaccctgtcc tccacgcct ctttccttgt gtccattccc tgagcctggg
180
gaagttgctg cagagccaca ggtcggngag acgctgagtc tgggcgagcg cttgctgccg
240
gacagctgga gaaacagcag cgggggggccc tgtccatgtg gcaagccaag ccatcgaggg
300
gatcacaggc cccttcaggg aagggactga gcacctgcca cctgcctcca ggatgggcct
360
gatccccct cctgtgtacc ccacaggctg cagtgcacct gccagcaca cacctgoggg
420
ggcacctgcg accgctgctg ccccggttc aatcagcagc cgtggaagcc tgcgactgcc
480
aacagtgcc aagagtgcc gtctgtaac tgctacggc atgccaccga ctgttactac
540
gaccctgagg tggaccggcg ccgcgccagc cagagcctgg atggcaccta tcagggtggg
600
ggtgtctgta tcgactgcc aaccacacc gccggcgctc actgtgagcg ctgctgccc
660
ggcttctacc gctctcccaa ccacctctc gactcgccc acgtctgccg ccgctgcaac
720
tgcgagtccg acttcacgga tggcacctgc gaggacctga cgggtcgatg ctactgccg
780
cccaacttct ctggggagcg gtgtgacgtg tgtgccgagg gcttcacggg cttcccaagg
840
tgctaccgca cgcctctgct ctccaatgac accagggagc aggtgctgcc agccgggccg
900
attgtgaatt gtgactgcag cgcggcaggg acccagggca acgcctgccg gaaggaccca
960

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aggggtggggcc gctgttttgc caaccccaac ttccaaggca cccattgtga gctctgcgcg
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 ccagggttct acggccccgg ctgccctggg tcccttcacg cgt
 1063

<210> 1356

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1356

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Pro	His	Arg	Leu	Gln	Cys	Thr	Cys	Gln	His	Asn	Thr	Cys	Gly	Gly	Thr
			20					25					30		
Cys	Asp	Arg	Cys	Cys	Pro	Gly	Phe	Asn	Gln	Gln	Pro	Trp	Lys	Pro	Ala
			35				40					45			
Thr	Ala	Asn	Ser	Ala	Asn	Glu	Cys	Gln	Ser	Cys	Asn	Cys	Tyr	Gly	His
			50			55					60				
Ala	Thr	Asp	Cys	Tyr	Tyr	Asp	Pro	Glu	Val	Asp	Arg	Arg	Arg	Ala	Ser
65					70					75				80	
Gln	Ser	Leu	Asp	Gly	Thr	Tyr	Gln	Gly	Gly	Gly	Val	Cys	Ile	Asp	Cys
			85					90						95	
Gln	His	His	Thr	Ala	Gly	Val	Asn	Cys	Glu	Arg	Cys	Leu	Pro	Gly	Phe
			100					105						110	
Tyr	Arg	Ser	Pro	Asn	His	Pro	Leu	Asp	Ser	Pro	His	Val	Cys	Arg	Arg
			115				120					125			
Cys	Asn	Cys	Glu	Ser	Asp	Phe	Thr	Asp	Gly	Thr	Cys	Glu	Asp	Leu	Thr
			130			135						140			
Gly	Arg	Cys	Tyr	Cys	Arg	Pro	Asn	Phe	Ser	Gly	Glu	Arg	Cys	Asp	Val
145					150					155				160	
Cys	Ala	Glu	Gly	Phe	Thr	Gly	Phe	Pro	Ser	Cys	Tyr	Pro	Thr	Pro	Ser
				165					170					175	
Ser	Ser	Asn	Asp	Thr	Arg	Glu	Gln	Val	Leu	Pro	Ala	Gly	Gln	Ile	Val
			180				185						190		
Asn	Cys	Asp	Cys	Ser	Ala	Ala	Gly	Thr	Gln	Gly	Asn	Ala	Cys	Arg	Lys
			195				200					205			
Asp	Pro	Arg	Val	Gly	Arg	Cys	Phe	Ala	Asn	Pro	Asn	Phe	Gln	Gly	Thr
			210			215						220			
His	Cys	Glu	Leu	Cys	Ala	Pro	Gly	Phe	Tyr	Gly	Pro	Gly	Cys	Pro	Gly
225					230					235				240	
Ser	Leu	His	Ala												

<210> 1357

<211> 663

<212> DNA

<213> Homo sapiens

<400> 1357

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 120

ttcaacaccc ccgttttgcc tgtggggggg gtacgccctg taatcctgca aaggcccggt
 180
 tgggtgtccgg gggttttcgt cggctctccc aaccatcatc tagacggcgt ggcgatgtgg
 240
 tgcgagctgc ttgcggcggt gttctgtgcc cgagcttgcc tcgcctggct gcaagaatcc
 300
 ctggctcatc gagcttcagc gtcagtcaag tcgcaattgc ggcgcgacat cctgcaagcc
 360
 aggttgtcgc gtccactga cgcaacaatg ccgtcgagaa ccctcatcag cctgatgaca
 420
 acaggtctgg acgccctoga cggctactac tcgaagtacc ttcccagct tgtgctggcc
 480
 gtcacgtgc cagcagtgc agccaccgct atcggcctaa acgacctcac cagcctcgtc
 540
 atcgtcgtcg tgacgatccc gtcacatccc gttttcatgg ccctcattgg ctggcggacc
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 gaggcggccg tagcaaaacg gttcaaggta gccaccgac tggccaacca cttcgtgat
 660
 ctg
 663

<210> 1358

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

Xaa	Pro	Pro	Pro	Pro	Gly	Gly	Gly	Gly	Gly	Gly	Asn	Asn	Thr	Arg	Lys
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Val	Asp	Arg	Tyr	Pro	Ser	Trp	Ser	Ser	Trp	Ser	Ile	Tyr	Gly	Pro	Arg
			20					25					30		
Cys	Gly	Phe	Gly	Thr	Glu	Val	Glu	Phe	Asn	Thr	Pro	Val	Leu	Pro	Val
		35				40					45				
Gly	Gly	Val	Arg	Pro	Val	Ile	Leu	Gln	Arg	Pro	Gly	Trp	Cys	Pro	Gly
	50					55					60				
Val	Phe	Val	Gly	Leu	Pro	Asn	His	His	Leu	Asp	Gly	Val	Ala	Met	Trp
65				70					75					80	
Cys	Glu	Leu	Leu	Ala	Ala	Val	Phe	Cys	Ala	Arg	Ala	Cys	Leu	Ala	Trp
				85					90					95	
Leu	Gln	Glu	Ser	Leu	Ala	His	Arg	Ala	Ser	Ala	Ser	Val	Lys	Ser	Gln
			100					105					110		
Leu	Arg	Arg	Asp	Ile	Leu	Gln	Ala	Arg	Leu	Ser	Arg	Pro	Thr	Asp	Ala
	115					120						125			
Thr	Met	Pro	Ser	Arg	Thr	Leu	Ile	Ser	Leu	Met	Thr	Thr	Gly	Leu	Asp
	130					135						140			
Ala	Leu	Asp	Gly	Tyr	Tyr	Ser	Lys	Tyr	Leu	Pro	Gln	Leu	Val	Leu	Ala
145				150					155					160	
Val	Ile	Val	Pro	Ala	Val	Leu	Ala	Thr	Ala	Ile	Gly	Leu	Asn	Asp	Leu
				165					170					175	
Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val	Phe
			180					185					190		
Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg	Phe
	195					200						205			
Lys	Val	Ala	Thr	Arg	Leu	Ala	Asn	His	Phe	Ala	Asp	Leu			

210

215

220

<210> 1359

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1359

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<211> 104

<212> PRT

<213> Homo sapiens

<400> 1360

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<213> Homo sapiens

<400> 1361

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<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		780
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<210> 1364
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1364
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 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
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 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
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<210> 1365
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 1365

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<210> 1366
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 35 40 45
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 Phe Tyr Thr Gly Leu Glu Ile Gln Tyr Leu Gly Val Glu Val Asp Asp
 85 90 95
 Phe Pro Glu Val Asp Ile Ser Gln His Phe Arg Lys Ala Ser Glu Phe
 100 105 110
 Leu Asp Glu Ala Leu Leu Thr Tyr Arg Gly Lys Val Leu Val Ser Ser
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<210> 1367
 <211> 330
 <212> DNA
 <213> Homo sapiens

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<210> 1368

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1368

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Thr	Arg														

<210> 1369

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1369

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<210> 1370

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1370

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 Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
 35 40 45
 Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
 50 55 60
 Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
 65 70 75 80
 Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
 85 90 95
 Asn Met Leu Tyr Phe Ser Arg Asn
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<210> 1371

<211> 648

<212> DNA

<213> Homo sapiens

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 480
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 540
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<211> 101

<212> PRT

<213> Homo sapiens

<400> 1372

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 20 25 30
 Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

35 40 45
 Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
 50 55 60
 Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
 65 70 75 80
 Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
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 Lys Leu Tyr Leu Gln
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<210> 1373
 <211> 369
 <212> DNA
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<210> 1374
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1374
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 20 25 30
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 35 40 45
 Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
 50 55 60
 Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
 65 70 75 80
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 85 90 95
 Leu Arg

<210> 1375
 <211> 282

<212> DNA

<213> Homo sapiens

<400> 1375

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 180
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 282

<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

Xaa Ala Phe Asp Arg Ala Thr Arg Gly His Val Ile Asp Tyr Ile Asp
 1 5 10 15
 Phe His Leu His Gly Trp His Trp Pro Ala Phe Asn Ile Ala Asp Met
 20 25 30
 Ala Ile Val Gly Gly Ala Ile Ala Leu Val Ala Gln Ser Phe Met Ser
 35 40 45
 Val Glu Asn Pro Ala Ala Thr Lys Glu Ser Gln
 50 55

<210> 1377

<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

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<210> 1378

<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378

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			85					90					95		
Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
		100						105					110		
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Lys Lys Leu Leu Leu Ala	Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu	
145	150	155
Cys Ser Gly Leu Ser Thr	Gln Asn His Ala Asn His Asn His Arg Ile	160
165	170	175
Arg Thr Asn Pro Ala Ile Val	Lys Thr Glu Asn Ser Trp Ser Asn Lys	
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Ala Lys Ser Ile Cys Gln Gln	Gln Lys Pro Gln Arg Arg Pro Cys Ser	
195	200	205
Glu Leu Leu Lys Tyr Leu Thr	Thr Asn Asp Asp Pro Pro His Thr Lys	
210	215	220
Pro Thr Glu Asn Arg Asn Ser	Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys	
225	230	235
Lys Ser His Thr Gln Ser Gln	Ser Gln His Leu Gln Ala Lys Pro Thr	240
245	250	255
Thr Leu Ser Leu Pro Leu Thr	Pro Glu Ser Pro Asn Asp Pro Lys Gly	
260	265	270
Ser Pro Phe Glu Asn Lys Thr	Ile Glu Arg Thr Leu Ser Val Glu Leu	
275	280	285
Ser Gly Thr Ala Gly Leu Thr	Pro Pro Thr Thr Pro Pro His Lys Ala	
290	295	300
Asn Gln Asp Asn Pro Phe Arg	Ala Ser Pro Lys Leu Lys Ser Ser Cys	
305	310	315
Lys Thr Val Val Pro Pro Ser	Lys Lys Pro Arg Tyr Ser Glu Ser	
325	330	335
Ser Gly Thr Gln Gly Asn Asn	Ser Thr Lys Lys Gly Pro Glu Gln Ser	
340	345	350
Glu Leu Tyr Ala Gln Leu Ser	Lys Ser Ser Val Leu Thr Gly Gly His	
355	360	365
Glu Glu Arg Lys Thr Lys Arg	Pro Ser Leu Arg Leu Phe Gly Asp His	
370	375	380
Asp Tyr Cys Gln Ser Ile Asn	Ser Lys Thr Glu Ile Leu Ile Asn Ile	
385	390	395
Ser Gln Glu Leu Gln Asp Ser	Arg Gln Leu Glu Asn Lys Asp Val Ser	
405	410	415
Ser Asp Trp Gln Gly Gln Ile	Cys Ser Ser Thr Asp Ser Asp Gln Cys	
420	425	430
Tyr Leu Arg Glu Thr Leu Glu	Ala Ser Lys Gln Val Ser Pro Cys Ser	
435	440	445
Thr Arg Lys Gln Leu Gln Asp	Gln Glu Ile Arg Ala Glu Leu Asn Lys	
450	455	460
His Phe Gly His Pro Ser Gln	Ala Val Phe Asp Asp Glu Ala Asp Lys	
465	470	475
Thr Gly Glu Leu Arg Asp Ser	Asp Phe Ser Asn Glu Gln Phe Ser Lys	
485	490	495
Leu Pro Met Phe Ile Asn Ser	Gly Leu Ala Met Asp Gly Leu Phe Asp	
500	505	510
Asp Ser Glu Asp Glu Ser Asp	Lys Leu Ser Tyr Pro Trp Asp Gly Thr	
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Gln Ser Tyr Ser Leu Phe Asn	Val Ser Pro Ser Cys Ser Ser Phe Asn	
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Ser Pro Cys Arg Asp Ser Val	Ser Pro Pro Lys Ser Leu Phe Ser Gln	

545		550		555		560
Arg Pro Gln Arg Met Arg Ser Arg Ser Arg Ser Phe Ser Arg His Arg						
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Ser Cys Ser Arg Ser Pro Tyr Ser Arg Ser Arg Ser Arg Ser Pro Gly						
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Ser Arg Ser Ser Ser Arg Ser Cys Tyr Tyr Tyr Glu Ser Ser His Tyr						
	595		600		605	
Arg His Arg Thr His Arg Asn Ser Pro Leu Tyr Val Arg Ser Arg Ser						
	610		615		620	
Arg Ser Pro Tyr Ser Arg Arg Pro Arg Tyr Asp Ser Tyr Glu Glu Tyr						
	625		630		635	
Gln His Glu Arg Leu Lys Arg Glu Glu Tyr Arg Arg Glu Tyr Glu Lys						
	645		650		655	
Arg Glu Ser Glu Arg Ala Lys Gln Arg Glu Arg Gln Arg Gln Lys Ala						
	660		665		670	
Ile Glu Glu Arg Arg Val Ile Tyr Val Gly Lys Ile Arg Pro Asp Thr						
	675		680		685	
Thr Arg Thr Glu Leu Arg Asp Arg Phe Glu Val Phe Gly Glu Ile Glu						
	690		695		700	
Glu Cys Thr Val Asn Leu Arg Asp Asp Gly Asp Ser Tyr Gly Phe Ile						
	705		710		715	
Thr Tyr Arg Tyr Thr Cys Asp Ala Phe Ala Ala Leu Glu Asn Gly Tyr						
	725		730		735	
Thr Leu Arg Arg Ser Asn Glu Thr Asp Phe Glu Leu Tyr Phe Cys Gly						
	740		745		750	
Arg Lys Gln Phe Phe Lys Ser Asn Tyr Ala Asp Leu Asp Ser Asn Ser						
	755		760		765	
Asp Asp Phe Asp Pro Ala Ser Thr Lys Ser Lys Tyr Asp Ser Leu Asp						
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Phe Asp Ser Leu Leu Lys Glu Ala Gln Arg Ser Leu Arg Arg						
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<210> 1379

<211> 590

<212> DNA

<213> Homo sapiens

<400> 1379

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120
tttgctgggg ccgcggtgac agagtgccat agaccaggca gctgaaacag agttcaattt
180
cttttaaagc ccggggggccg aaaaccacct aacaagggtt tgtgggggct cgttccttgg
240
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cgcgtnacc catctctgcc ctccgagtc ctgccgtgtg gccgtgtcna ccacacctg
420
ccctcggtgt cctgtccgtg tggccgagtc naccacctc tgcctcggt gtcctgccc
480

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tgtggcgcgc tcnaccaccc tctgccctcg gtgtccccgc cgtgtggcgc cgtcnaccca
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<210> 1380

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1380

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Lys	Gly	Leu	Trp	Gly	Leu	Val	Pro	Trp	Glu	Asp	Val	Arg	Ala	Ile	Trp
		20					25						30		
Cys	Pro	Cys	Arg	Val	Ala	Ala	Ser	Pro	Ile	Ser	Ala	Leu	Gly	Val	Pro
		35					40					45			
Ala	Leu	Trp	Pro	Arg	His	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys
	50					55					60				
Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys	Gly	Arg
65					70					75				80	
Val	Xaa	Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa
				85					90					95	
Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Pro
		100						105					110		
Leu	Pro	Ser	Val	Ser	Pro	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro
		115					120					125			
Ser	Val	Ser	Pro	Pro	Cys	Gly	Arg	Val	Thr	His	Leu	Cys			
	130						135					140			

<210> 1381

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1381

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 120
 gtgaggccac ggagagtcca ggccggagca cactgaccgc cttggctaag cattcatttc
 180
 cgtgtcctgg ctgccatcag agaggaggca ggtccacag atctgctctt gtttctgctg
 240
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 300
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<210> 1382

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1382

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Thr Phe Trp Pro Arg Pro Asp Thr Met Cys Glu Ala Thr Glu Ser Pro
 20           25           30
Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
 35           40           45
Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
 50           55           60
Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
 65           70           75           80
Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
 85           90           95
Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly
100           105           110
Leu Ala Pro Ala Lys Gly Leu Phe Gly Asp Leu
115           120

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<210> 1383

<211> 906

<212> DNA

<213> Homo sapiens

<400> 1383

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120
tctgcagctg gtctctggag acccacggcc tctctctctc tgcccctgac caatacacca
180
caaagcctc acatgagctc acccacaccc ccaagagcca tgggtgtcac aaagcaaaga
240
ccaagccaga ctcaatcctg tggccccagg gtcagccgca gagcagacaa ctagaacctc
300
acaagaagct gaacacaggc tgggtcacct ataaacaggg aggccatcct gaagggagga
360
agcacccaac cagaggtgaa ctcaccttgg accattcgac aatgcagtcc aggcagaagt
420
aatgggcaca gttctnccgg cgtccccacg gcctgggtctc tgaatgcgtt gagacagatt
480
gggcagctct ctgcatcatc atcagaattg aaagagccag cggttccag tttcccctga
540
gtaccgcta cctccagcaa tgtctccccg tegtcttcag aatcctcgga accagatctg
600
ttttccaggt cttctctctc agacgccccc tegtcttctc cgtctgtgcc atctccatgc
660
tcgctgtcac tgtctgtccc agagtcccca ctgctgcccc cgctgcttcc tcaaagtca
720
cctgccgggt ccgcagggcc gacctgtggg tgtccatccg gcctggggct ccggggccaca
780

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agctcatcca ggctgtcgtc atccattgct gcacattgag ctcagctccg gaaacctcgt
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<210> 1384

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1384

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Lys	Val	Thr	Thr	His	His	Ser	Thr	Pro	Ala	Ser	Gly	Leu	Gln	Ala	Lys
			20					25					30		
Met	Ala	Pro	Met	Ser	Thr	Arg	Val	Ser	Ala	Ala	Gly	Pro	Gly	Arg	Pro
		35					40					45			
Thr	Ala	Ser	Ser	Leu	Leu	Pro	Leu	Thr	Asn	Thr	Pro	Gln	Thr	Pro	His
		50				55				60					
Met	Ser	Ser	Pro	Thr	Pro	Pro	Arg	Ala	Met	Val	Leu	Thr	Lys	Gln	Arg
65					70				75					80	
Pro	Ser	Gln	Thr	Gln	Ser	Cys	Gly	Pro	Arg	Val	Ser	Arg	Arg	Ala	Asp
				85					90					95	

Asn

<210> 1385

<211> 210

<212> DNA

<213> Homo sapiens

<400> 1385

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 120
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 180
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<210> 1386

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1386

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Val	Val	Cys	Met	Xaa	Trp	Cys	Val	His	Val	Cys	Xaa	Cys	Val	Cys	Met
			20					25				30			
Val	Met	Cys	Thr	Cys	Ala	Leu	Cys	Val	Ala	Cys	Met	His	Gly	Val	Cys

35 40 45
 r Cys Ala Leu Cys Val Gly Cys Met Xaa Trp Trp Val His Ile Cys
 50 55 60
 Thr Gly Gly Cys Val Cys
 65 70

<210> 1387
 <211> 521
 <212> DNA
 <213> Homo sapiens

<400> 1387
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 120
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 360
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 420
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 521

<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1388
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 Lys Gly Gln Val Val Gln Ala Glu Gly Val Ser Gly Cys Gly Lys His
 20 25 30
 Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
 35 40 45
 Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
 50 55 60
 Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
 65 70 75 80
 Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
 85 90 95
 Ala Ala Phe Ser Gly His Pro
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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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420
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480
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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

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			20					25					30		
Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
		35					40				45				
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
	50					55				60					
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70				75					80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85					90						95	
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
			115				120					125			
Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

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145	150	155
Glu Thr Phe Tyr Gly Glu His Ser Leu Leu Val Gln Gln Ala Glu Ser		160
	165	170
Trp Ile Arg Lys Ile Thr Asn Asn Gly Gly Tyr Lys Ala Arg Trp Ala		175
	180	185
Leu Lys Val Thr Trp Val Asn Ala His Ala Tyr Pro Ala Gln Trp Thr		190
	195	200
Leu Gly Ser Asn Thr Tyr Gln Ala Ile Leu Ser Thr Asp Gly Ser Arg		205
	210	215
Ser Tyr Ala Leu Phe Leu Tyr Gln Ser Gly Gly Met Gln Trp Asp Val		220
225	230	235
Ala Gln Arg Ser Gly Asn Pro Val Leu Met Gly Phe Ser Ser Gly Asp		240
	245	250
Gly Tyr Phe Glu Asn Ser Pro Leu Met Ser Gln Pro Val Trp Glu Arg		255
	260	265
Tyr Arg Pro Asp Arg Phe Leu Asn Ser Asn Ser Gly Leu Gln Gly Leu		270
	275	280
Gln Phe Tyr Arg Leu His Arg Glu Glu Arg Pro Asn Tyr Arg Leu Glu		285
	290	295
Cys Leu Gln Trp Leu Lys Ser Gln Pro Arg Trp Pro Ser Trp Gly Trp		300
305	310	315
Asn Gln Val Ser Cys Pro Cys Ser Trp Gln Gln Gly Arg Arg Asp Leu		320
	325	330
Arg Phe Gln Pro Val Ser Ile Gly Arg Trp Gly Leu Gly Ser Arg Gln		335
	340	345
Leu Cys Ser Phe Thr Ser Trp Arg Gly Gly Val Cys Cys Ser Tyr Gly		350
	355	360
Pro Trp Gly Glu Phe Arg Glu Gly Trp His Val Gln Arg Pro Trp Gln		365
	370	375
Leu Ala Gln Glu Leu Glu Pro Gln Ser Trp Cys Cys Arg Trp Asn Asp		380
385	390	395
Lys Pro Tyr Leu Cys Ala Leu Tyr Gln Gln Arg Arg Pro His Val Gly		400
	405	410
Cys Ala Thr Tyr Arg Pro Pro Gln Pro Ala Trp Met Phe Gly Asp Pro		415
	420	425
His Ile Thr Thr Leu Asp Gly Val Ser Tyr Thr Phe Asn Gly Leu Gly		430
	435	440
Asp Phe Leu Leu Val Gly Ala Gln Asp Gly Asn Ser Ser Phe Leu Leu		445
	450	455
Gln Gly Arg Thr Ala Gln Thr Gly Ser Ala Gln Ala Thr Asn Phe Ile		460
465	470	475
Ala Phe Ala Ala Gln Tyr Arg Ser Ser Ser Leu Gly Pro Val Thr Val		480
	485	490
Gln Trp Leu Leu Glu Pro His Asp Ala Ile Arg Val Leu Leu Asp Asn		495
	500	505
Gln Thr Val Thr Phe Gln Pro Asp His Glu Asp Gly Gly Gly Gln Glu		510
	515	520
Thr Phe Asn Ala Thr Gly Val Leu Leu Ser Arg Asn Gly Ser Glu Val		525
	530	535
Ser Ala Ser Phe Asp Gly Trp Ala Thr Val Ser Val Ile Ala Leu Ser		540
545	550	555
Asn Ile Leu His Ala Ser Ala Ser Leu Pro Pro Glu Tyr Gln Asn Arg		560

1185

995	1000	1005
Pro Arg Arg Ser Glu Glu	Pro Arg Asn Asp Val	Val Phe Gln Pro Ile
1010	1015	1020
Ser Gly Glu Asp Val Arg Asp	Val Thr Ala Leu Asn Val	Ser Thr Leu
1025	1030	1035
Lys Ala Tyr Phe Arg Cys Asp	Gly Tyr Lys Gly Tyr Asp	Leu Val Tyr
1045	1050	1055
Ser Pro Gln Ser Gly Phe Thr Cys	Val Ser Pro Cys Ser Arg	Gly Tyr
1060	1065	1070
Cys Asp His Gly Gly Gln Cys Gln	His Leu Pro Ser Gly Pro Arg	Cys
1075	1080	1085
Ser Cys Val Ser Phe Ser Ile Tyr	Thr Ala Trp Gly Glu His Cys	Glu
1090	1095	1100
His Leu Ser Met Lys Leu Asp Ala	Phe Phe Gly Ile Phe Phe Gly	Ala
1105	1110	1115
Leu Gly Gly Leu Leu Leu Gly Val	Gly Thr Phe Val Val Leu Arg	
1125	1130	1135
Phe Trp Gly Cys Ser Gly Ala Arg	Phe Ser Tyr Phe Leu Asn Ser	Ala
1140	1145	1150
Glu Ala Leu Pro		
1155		

<210> 1391

<211> 481

<212> DNA

<213> Homo sapiens

<400> 1391

gtcgacggca tcgaggtcca tgacaaggca accgacctca accgcctgcg ccagaagatc

60

ggcattgtgt tccagcagtg gaacgccttc ccgcacctca ccgtgctgga aaacgtgatg

120

ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcgggtccgg

180

caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcana gctttccggc

240

ggccagcaac agcgcatggc gattgcccgg gccttgccca tgtcgccgga ctacatgctg

300

ttcgacgaag ccacctggc ccttgatccg cagttggtgg gcgaggtgct ggacaccatg

360

cgcattgctg ccgaagacgg catgaccatg gtcttggtga cccatgaaat ccgctttgcc

420

cgcgatgtgt ccgatcgct ggcgttcttt cgcaacggcc tgggtgcacga gatcggcgcg

480

c

481

<210> 1392

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1392

Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

```

1           5           10           15
Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
20           25           30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
35           40           45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
50           55           60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
65           70           75           80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
85           90           95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
100          105          110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
115          120          125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
130          135          140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
145          150          155          160

```

<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

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cggccgccat cggcgcgggc cttgtgggat atggccatta ctgaggtgct ggccggctac
60
tacgaacccg acgaacacgg acaccgcaag cccgagtcgt tgtacggcgc ggtcaagatg
120
tgggccccttc tgcgcgctca gggcatcagg tggcccgtcg cancggtgga gcgcctcatg
180
cgggacaacc ggtggcgtgg ggtgaccgc cgtaagaagg ttncgcacca ccatcgctga
240
cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
300
caagttgct
309

```

<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

```

Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
1           5           10           15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
20           25           30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
35           40           45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
50           55           60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

```

65

70

75

<210> 1395

<211> 347

<212> DNA

<213> Homo sapiens

<400> 1395

accggtgggg ttcgtggtgg cctgggttact ttttggcgcg agcgggtgtgg tgtgggcccgt
60tatgacggta gtcgtgggcg aaacgggtgct tgctggttg cgccgtcaac gtcgaagagc
120ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
180gtcgggtgggg gagatccct cagttgcact agagcacgtg gccgatgacg tggaggtatt
240ggctcaggct aggcgggctc atgcagtggg cggaagcgtt tccgacgccc tcattgccac
300ctcccgga caaggatgg ctggtctggt gccactagcc caccgct
347

<210> 1396

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1396

Met Thr Val Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
1 5 10 15Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
20 25 30Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
35 40 45Ala Leu Glu His Val Ala Asp Val Glu Val Leu Ala Gln Ala Arg
50 55 60Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
65 70 75 80Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
85 90 95

<210> 1397

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1397

caattgcgcg ggttactgca ggcgaagatg cagatgatgt cggacaccaa tttcctcgac
60ctggccccgc tgcgattgc cgccactatc cattctcgg aacgcgcgca agacatggtc
120aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
180ggtcgactgt cctgcagcga cccggcgctt gctgcccacc agatacaaag cctgctcaag
240

gcgttcgcct tttggccgca aatcaccctg ggccagccgg tgctggatgc cgccagccag
 300
 gccaacgt
 308

<210> 1398
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1398
 Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala
 1 5 10 15
 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn
 20 25 30
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
 35 40 45
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
 50 55 60
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
 65 70 75 80
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
 85 90

<210> 1399
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1399
 gctagctaac atttatTTTT gtttttatta ttgttatcta gtggtaaaaa tttcttaagc
 60
 aatgaactga agtctagatt tttgagatgt agtcctttac tgattataaa gcaaagtgcct
 120
 ttagatattt taacttcac agtactatct gtagtaggag gctgatttta ctaaaattag
 180
 ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgetgaat
 240
 ctgagaatgc caggacattt cacgtggtat gaatgtagga tattcattta cacatcgctg
 300
 cacagacagc ctctatataa cccaccctgt tggggtattg aattttttct tttcccgccc
 360
 tacttttaaa tcttgatcatg taatttcaac acataatttg tggcacttta gtttttttac
 420
 cctttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaatggg
 480
 aacaaagaaa attgcttcac catctgtgaa cccctccttt ttagtcccc ttcacgcgt
 539

<210> 1400
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1400

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1 5 10 15
 Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
 20 25 30
 Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
 35 40 45
 Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
 50 55 60
 Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
 65 70 75 80
 Asn Pro Ser Phe Cys Ser Pro Leu His Ala
 85 90

<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

ttcgaggggt cacttggact caagcttcgc gaagtcggg acctcggacg accgattttt
 60
 cggctgtgca ccgtcaccgc aaggctggcg tgggttnnct catcaccggc gcggcgatgg
 120
 ncattggggt ttgatggcgc cgtttcctcg ctgctgggcg cgatcctcat cgtcaccggc
 180
 ccaacggtga ttaaccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtctg
 240
 ttgaggtggg aaggaatcgt cgtcgatccg ctccggcgcca tctgggcatt actggtgtat
 300
 caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
 360
 accctattgg tcgggctgct cttcgtggc cccatcgggt ggatcgtcac cgcgatgatg
 420
 aaacggcacc tcatcccga cttcctacaa ggctgattt tcgttggggt cgcggttga
 480
 acgtgtgttg gcgctaacgt cattcgggag gaatcgggccc tggtcgccgt tacgatgctc
 540
 ggcattctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
 600
 cacctgcagg tgctcctcgt tggcgtccta ttcacatgc ttgcaggacg cgt
 653

<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1 5 10 15
 Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
 20 25 30
 Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

      35              40              45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
  50              55              60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
  65              70              75              80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
      85              90              95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
      100              105              110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
      115              120              125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
      130              135              140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
      145              150              155              160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
      165              170              175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
      180              185              190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
      195              200              205
Val Leu Phe Ile Met Leu Ala Gly Arg
      210              215

```

<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

```

aagctttgca gtttcttggt atccaaatcc aggcgttctt ggtctttttc cacaacagtg
60
tgtgccacat gaaatggaac acgggcaaac atatctgac caggaaacat tagccaagta
120
tggtccttgg ggtcatgac tccacaagtt gggcatatct cctttatcag ctgcttgcca
180
gagcttcctt ccattctctt cattatgacc tcaaagggag atggcacgct agtcttggac
240
gtcctagctt gtttccgaag ggctgtcaga gcttccctgt taccatttct tatcttatca
300
ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc
360
agagcctctt gaagctgctt catgttgga tcc
393

```

<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

```

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
  1              5              10              15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

```
<210> 1405
<211> 421
<212> DNA
<213> Homo sapiens
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<210> 1406
<211> 140
<212> PRT
<213> Homo sapiens

1192

	85		90		95										
Gly	Lys	Ala	Val	Gly	Thr	Val	Phe	Ala	Lys	Ser	Gln	Leu	Val	Ile	Arg
	100							105					110		
His	Thr	Ala	Glu	Asp	Thr	Trp	Glu	Leu	Leu	Ile	Arg	Arg	Ser	Phe	Ser
	115						120						125		
Asp	Tyr	Trp	Trp	Leu	Trp	Leu	Gln	Asp	Ala	Ala	Ala				
	130						135						140		

<210> 1407

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 1407

```

nncggccggg agaagctgga gctcgctctg tctaacctgc aggcagacgt cctggagttg
60
ctgctggagt ttgtctacac gggctccctg gtcctcgact cggccaacgc caagacactg
120
ctggaggcgg ccagcaagtt ccagttccac accttctgca aagtctgcgt gtcctttctt
180
gagaagcagc tgacggccag caactgcctg ggcgttgctg ccatggccga ggccatgcag
240
tgcagcagc tctaccacat ngccaaggcc ttcgcgctgc agatcttccc cgaggtggcc
300
gcccaggagg agatcctcag catctccaag gacgacttca tcgcctacgt ctccaacgac
360
agcctcaaca ccaaggctga ggagctggtg tacgagacag tcatcaagtg gatcaagaag
420
gaccccgga caegcacaca gtacgcggct gagctcctgg ccgtgggtccg cctccccctt
480
atccaccca gctacctgct caatgtggtt gacaatgaag agctgatcaa gtcacagaa
540
gcctgccggg acctggtgaa cgaggccaaa cgctaccata tgctgccccca cgcccgccag
600
gagatgcaga cgccccgaac ccggccgcgc ctctctgcag gtgtgggtga ggtcatcgtc
660
ttggttgggg gccgtcagat ggtggggatg acccagcgt cgctggtggc cgtcacctgc
720
tggaacccgc agaacaacaa gtggtacccc ttggcctcgg tgcccttttt aggcccgga
780
ttcttcagt tagtgagtgc agggccaac atctacctct cagggtgggat ggaatcaggg
840
gtgccgctg ctgatgtctg gtgctacatg tcctgcttg ataactggaa cctcgtctcc
900
agaatgccag tcccccgctg tcggcccat agcctcgtct acgatgggaa gatttacacc
960
ctcgggggac ttggcgtggc aggcaacgtg gaccacgtgg agagga
1006

```

<210> 1408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 1408

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1 5 10 15
 Val Leu Glu Leu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
 20 25 30
 Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
 35 40 45
 Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
 50 55 60
 Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
 65 70 75 80
 Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
 85 90 95
 Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
 100 105 110
 Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
 115 120 125
 Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
 130 135 140
 Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
 145 150 155 160
 Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
 165 170 175
 Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
 180 185 190
 His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
 195 200 205
 Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
 210 215 220
 Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
 225 230 235 240
 Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
 245 250 255
 Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
 260 265 270
 Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
 275 280 285
 Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
 290 295 300
 Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
 305 310 315 320
 Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
 325 330 335

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
 60
 gcacgagata gcaccatgca actgatcgat atcggcgctca acctgaccaa cagcagtttc
 120

cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg ccggcggttac gcaaattgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
 240
 gcaagcggcg cccacctgtt cgccacggcc ggcgtgcac
 279

<210> 1410
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1410
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala
 1 5 10 15
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly
 20 25 30
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val
 35 40 45
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr
 50 55 60
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp
 65 70 75 80
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His
 85 90

<210> 1411
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 1411
 nnncgatattt caggaatgaa gaacgaacct gaatggatgc ttgaatggcg cttgagtgca
 60
 ttctcgtgaat ggtagaaat ggaagagcct agctgggctc atgtcgatta ccctaaaatt
 120
 gattttcaat ctattttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatcctga attgttacgt acttatgaaa aactgggcat tcctctcata
 240
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcgtt
 300
 actacttttc gtcaaaagct t
 321

<210> 1412
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1412
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp
 1 5 10 15
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

```

                20                25                30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
      35                40                45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
      50                55                60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
      65                70                75                80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
      85                90                95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
      100                105

```

<210> 1413

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1413

```

atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgacct gatcgaagac
60
ggcgaaatcg gctcgcacct gatcatcgac ctgccacgtc cgcgtgcccg tggttcacac
120
cgcttggccc cggttgaagc cgaagtgata aaccgtgtgc tgtcataacc cngcacgaag
180
ccggaacccg aacatgttaa accgctgcct acgaaattgc gttgggctca ataactcata
240
gaggaacacc atcatgacta taaaagccat caacgtgcgt aaccagttaa aaggcaccat
300
caaggaaatc gtagtcggca acgtgctctc ggaaatcgac gtgcagaccg cctccgggat
360
cgtcacttct gtgatcacta cgcgt
385

```

<210> 1414

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1414

```

Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
  1                5                10                15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
      20                25                30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
      35                40                45
Val Ile Asn Arg Val Leu Ser
      50                55

```

<210> 1415

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1415

acgcgtgcag gcaaacatta atatgagtta acaccacaca ggatgagact gtttgtaacct
 60
 gtaactgtcc ttgtcatctg tcttgacagat ttagaagagg aatcagaaaag ctgggacaac
 120
 tctgaggctg aagaggagga gaaagccctt gtgttgccag agagtacaga agggcgggag
 180
 ctgaccaggg gcccggcaga gtcctcctct ctctcaggct gtgggagctg gcagccccgg
 240
 aagctgccag tcttcaagtc cctccggcac atgaggcagg tctggggtgc cccttctttc
 300
 cgcattgtgg cctggcacgt tctcatgggg aaccagggtga tctggaaaag cagagacgtg
 360
 gacctcgtcc agtcagcttt tgaagtactt cgggtgagaa catcttttcc ttaggtgtgc
 420

<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

Met	Arg	Leu	Phe	Val	Pro	Val	Thr	Val	Leu	Val	Ile	Cys	Leu	Ala	Asp
1				5					10					15	
Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
			20					25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
	50					55				60					
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65					70					75				80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
			85						90					95	
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
			100					105					110		
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<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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<210> 1418

<211> 1532

<212> PRT

<213> Homo sapiens

<400> 1418

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 20 25 30
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 35 40 45
 Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
 50 55 60
 Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
 65 70 75 80
 Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
 85 90 95
 Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
 100 105 110
 Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
 115 120 125
 Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
 130 135 140
 Met Thr Thr Ser Thr Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
 145 150 155 160
 Thr Ala Gly Thr Glu Ser Ser Thr Pro Val Thr Ser Ala Val Ser Ile
 165 170 175
 Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
 180 185 190
 Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
 195 200 205
 Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
 210 215 220
 Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
 225 230 235 240
 Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
 245 250 255
 Ser Val Thr Asn Thr Ser Met Met Thr Ser Glu Lys Ile Thr Val Thr
 260 265 270
 Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
 275 280 285
 Pro Val Thr Gly Ser Leu Met Pro Val Thr Ser Ala Ala Leu Val Thr
 290 295 300
 Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
 305 310 315 320
 Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
 325 330 335
 Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
 340 345 350
 Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
 355 360 365
 Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
 370 375 380
 Pro Ser Ser Val Ser Asn Thr Phe Leu Val Thr Ser Lys Val Phe Arg

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385          390          395          400
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          405          410          415
Leu Ser Val Ser Gly Thr Ile Ser Ala Ile Thr Ser Lys Val Ser Thr
          420          425          430
Ile Trp Trp Ser Asp Thr Leu Ser Thr Ala Leu Ser Pro Ser Ser Leu
          435          440          445
Pro Pro Lys Ile Ser Thr Ala Phe His Thr Gln Gln Ser Glu Gly Ala
          450          455          460
Glu Thr Thr Gly Arg Pro His Glu Arg Ser Ser Phe Ser Pro Gly Val
465          470          475          480
Ser Gln Glu Ile Phe Thr Leu His Glu Thr Thr Thr Trp Pro Ser Ser
          485          490          495
Phe Ser Ser Lys Gly His Thr Thr Trp Ser Gln Thr Glu Leu Pro Ser
          500          505          510
Thr Ser Thr Gly Ala Ala Thr Arg Leu Val Thr Gly Asn Pro Ser Thr
          515          520          525
Gly Ala Ala Gly Thr Ile Pro Arg Val Pro Ser Lys Val Ser Ala Ile
530          535          540
Gly Glu Pro Gly Glu Pro Thr Thr Tyr Ser Ser His Ser Thr Thr Leu
545          550          555          560
Pro Lys Thr Thr Gly Ala Gly Ala Gln Thr Gln Trp Thr Gln Glu Thr
          565          570          575
Gly Thr Thr Gly Glu Ala Leu Leu Ser Ser Pro Ser Tyr Ser Val Thr
          580          585          590
Gln Met Ile Lys Thr Ala Thr Ser Pro Ser Ser Ser Pro Met Leu Asp
          595          600          605
Arg His Thr Ser Gln Gln Ile Thr Thr Ala Pro Ser Thr Asn His Ser
610          615          620
Thr Ile His Ser Thr Ser Thr Ser Pro Gln Glu Ser Pro Ala Val Ser
625          630          635          640
Gln Arg Gly His Thr Gln Ala Pro Gln Thr Thr Gln Glu Ser Gln Thr
          645          650          655
Thr Arg Ser Val Ser Pro Met Thr Asp Thr Lys Thr Val Thr Thr Pro
          660          665          670
Gly Ser Ser Phe Thr Ala Ser Gly His Ser Pro Ser Glu Ile Val Pro
          675          680          685
Gln Asp Ala Pro Thr Ile Ser Ala Ala Thr Thr Phe Ala Pro Ala Pro
690          695          700
Thr Gly Asp Gly His Thr Thr Gln Ala Pro Thr Thr Ala Leu Gln Ala
705          710          715          720
Thr Pro Ser Ser His Asp Ala Thr Leu Gly Pro Ser Gly Gly Thr Ser
          725          730          735
Leu Ser Lys Thr Gly Ala Leu Thr Leu Ala Asn Ser Val Val Ser Thr
          740          745          750
Pro Gly Gly Pro Glu Gly Gln Trp Thr Ser Ala Ser Ala Ser Thr Ser
          755          760          765
Pro Asp Thr Ala Ala Ala Met Thr His Thr His Gln Ala Glu Ser Thr
770          775          780
Glu Ala Ser Gly Gln Thr Gln Thr Ser Glu Pro Ala Ser Ser Gly Ser
785          790          795          800
Arg Thr Thr Ser Ala Gly Thr Ala Thr Pro Ser Ser Ser Gly Ala Ser
          805          810          815
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Thr Thr Glu Leu Leu Ser Ala Ser Ala Ser His Gly Ala Ile Pro Val					
850		855		860	
Ser Thr Gly Met Ala Ser Ser Ile Val Pro Gly Thr Phe His Pro Thr					
865		870		875	880
Leu Ser Glu Ala Ser Thr Ala Gly Arg Pro Thr Gly Gln Ser Ser Pro					
885		890			895
Thr Ser Pro Ser Ala Ser Pro Gln Glu Thr Ala Ala Ile Ser Arg Met					
900		905		910	
Ala Gln Thr Gln Arg Thr Arg Thr Ser Arg Gly Ser Asp Thr Ile Ser					
915		920		925	
Leu Ala Ser Gln Ala Thr Asp Thr Phe Ser Thr Val Pro Pro Thr Pro					
930		935		940	
Pro Ser Ile Thr Ser Ser Gly Leu Thr Ser Pro Gln Thr Gln Thr His					
945		950		955	960
Thr Leu Ser Pro Ser Gly Ser Gly Lys Thr Phe Thr Thr Ala Leu Ile					
965		970			975
Ser Asn Ala Thr Pro Leu Pro Val Thr Tyr Ala Ser Ser Ala Ser Thr					
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Gly His Thr Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr					
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Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Ser					
1025		1030		1035	1040
Gly His Ala Thr Ser Leu Pro Val Thr Asp Ala Ser Ser Leu Ser Thr					
1045		1050			1055
Gly His Ala Thr Ser Leu His Val Thr Asp Ala Ser Ser Val Ser Thr					
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Gly His Ala Thr Leu Leu His Val Thr Asp Ala Ser Ser Ala Ser Thr					
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Gly His Thr Thr Ser Leu Pro Val Thr Asp Ala Ser Ser Val Ser Thr					
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Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr					
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Gly Asp Thr Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr					
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Gly His Ala Thr Pro Leu His Val Thr Ser Leu Ser Ser Val Ser Thr					
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Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Ser					
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Gly His Ala Thr Ser Leu Pro Val Thr Asp Ala Ser Ser Val Ser Thr					
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Gly His Ala Thr Ser Leu Pro Val Thr Ile Pro Ser Ser Ala Ser Ser					
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Gly Asp Ala Thr Ser Leu Pro Val Thr Ser Leu Ser Ser Leu Ser Thr					
1205		1210			1215
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1220		1225		1230	
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr					
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Gly His Ala Thr Ser Leu Leu Val Thr Asp Ala Ser Ser Val Ser Thr					

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Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		
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Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		
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Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		
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Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		
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Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		
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Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		
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Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		
	1460	1465
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Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		
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Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		
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Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser		
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<210> 1419

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1419

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120

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180

cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg

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309

<210> 1420
 <211> 103
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
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 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu
 85 90 95
 Lys Ala Asn Lys Lys Leu Met
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<210> 1421
 <211> 385
 <212> DNA
 <213> Homo sapiens

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<210> 1422
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1422
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 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Ala

35	40	45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu		
50	55	60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser		
65	70	75
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly		
85	90	95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly		
100	105	110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln		
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<210> 1423

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1423

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180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
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<210> 1424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1424

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20	30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu	
35	45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu	
50	60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met	
65	80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro	
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100	110

<210> 1425

<211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

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<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
 1 5 10 15
 Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Leu Gln
 20 25 30
 Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
 35 40 45
 Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
 50 55 60
 Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
 65 70 75 80
 Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
 85 90 95
 Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
 100 105 110
 Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
 115 120 125
 Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
 130 135 140
 Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

145 150 155 160
 Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
 165 170 175
 Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
 180 185 190
 Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
 195 200 205
 Ala Leu Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
 210 215 220

<210> 1427

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1427

atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
 60
 tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
 120
 ttgatgcaag tccatccctc aggggctgta cgtttccgtc actgttcagt tccccagaat
 180
 aaactcaact cacaaaagat acttccgggtg gaaaaggccc aagggaagat cctcttcatt
 240
 gcaggagaga atgacgaaag cttggctagc
 270

<210> 1428

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1428

Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
 1 5 10 15
 Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
 20 25 30
 Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
 35 40 45
 Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
 50 55 60
 Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
 65 70 75 80
 Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
 85 90

<210> 1429

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1429

ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
 60

catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcgggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgccgttg
 180
 atgcctcgg acatggcggt cgcagtgtcg acggtcaacc tggtagcagg cgcggccttg
 240
 ctgggggttg ccaccgggtt ggcgttttta ttgccatgg gcgaccgctt tgaccggcgc
 300
 aagctgttac tcgggcagat tgcgtggcg ttctgctttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcggtgat cggc
 384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met	Thr	Ser	Glu	Asn	Ala	Pro	Pro	Arg	Gly	Lys	Ile	Ile	Met	Met	Ala
1				5					10					15	
Val	Ile	Ala	Gly	Ala	Val	Val	Thr	Asn	Ile	Tyr	Cys	Thr	Gln	Pro	Val
		20						25					30		
Leu	Pro	Leu	Ile	Ala	Ser	Asp	Met	Gly	Val	Ala	Val	Ser	Thr	Val	Asn
		35					40					45			
Leu	Val	Ala	Gly	Ala	Ala	Leu	Leu	Gly	Phe	Ala	Thr	Gly	Leu	Ala	Phe
	50					55					60				
Leu	Leu	Pro	Met	Gly	Asp	Arg	Phe	Asp	Arg	Arg	Lys	Leu	Val	Leu	Gly
65				70				75						80	
Gln	Ile	Ala	Leu	Ala	Phe	Cys	Phe	Ala	Leu	Ala	Ala	Ala	Phe	Ala	Pro
				85				90						95	
Arg	Ile	Trp	Ala	Leu	Ile	Gly									
				100											

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

aagcttcagg gcagggtgcc cctgaagtca agcctgattc tgcattatct tgtatagcac
 60
 aaactggcga cacctgtgac tttgcctttc ccagggtccc tgctctccgc tccaggtagg
 120
 ctcagcctga gggagggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttggga gagctgtggg ctgcatcccc ctggctcttc gtccacagg
 240
 cagccccgct gtgtgtctgg tcttgacagg tggtgcagc ttctgggccc tgcttcacg
 300
 ccctcttccc atgatactcc agccttgga ggtgtaatag tttcccatgt tgctgatctt
 360
 tagtttgctt ccctctctt ggcgtgtctt tctgctgttc catcctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg
 60
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65 70 75 80
 Leu Val Asn Glu Ala Ser Gln Asp Lys Ala Glu Ser His Val Arg Ala
 85 90 95
 Met Gln

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

ntcttctggct tatgtggttt ccccggtgtg gaggtgggat ccactccccg catagtctct
 60
 cgtggcgatg ggacacctgg aaagtgtgtg gatgtctttg aatgtgttaa tgatacaaag
 120
 ccagcctcgc tatttaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
 180
 tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgcca gtgtggtgag
 240
 ataaactcgc agaggtacta cgtgcccgaa ggagagtgtg gccagtggtg tgaaatccag
 300
 tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
 360
 cgggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
 420
 gcgacctctc gcggacagac ctgcacaaac cctgtgaaag tgccctgggga gtgttgccct
 480
 gtgtgcgaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
 540
 tgcactctga caggaagga ctgcattaat ggtttcaaac gcgatcaciaa tgggtgtcgg
 600
 acctgtcagt gcataaacac cgaggaacta tggtcagaac gtaaacaagg ctgcacctg
 660
 aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgcca
 720
 aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
 780
 aataagcacg gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag
 840
 natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
 900
 ggcctctgct tcagctgggc caccatcct gtcgggcact tgtctcaccg tggatggtea
 960
 tcatcataaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
 1020
 acgggaaatg tgtgcctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
 1080
 cctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
 1140
 tactcennct ccatttgcca cggccctgga ggagaatact ttgtggaagg agaaactgtg
 1200
 aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
 1260

gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgaata acagcgtaac taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgctcct actgcataga agacacaatt
 1560
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac
 1620
 cttgacagct gcacccactg ctactgctg cagggccaga ccttctgctc gaccgtcagc
 1680
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
		20						25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55				60					
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70				75					80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85					90						95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Pro	Leu	Ala	Ala	Ala	Asn	
		100						105					110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
		115					120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
		130				135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
			165					170						175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
		180						185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
		195					200					205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

225 230 235 240
 Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
 245 250 255
 Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
 260 265 270
 Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
 275 280 285
 Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
 290 295 300
 Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
 305 310 315 320
 Ser Ser

<210> 1437

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1437

cgggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
 60
 aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccggt gactcgtgga
 120
 cccgtaccct catgacctcg atgcaacttc cacggtggtc caccgatcac atcgaccgct
 180
 cgggtccatgt cgatgctgag cagttcgacc ggttgcgcag cgagttcctg tcccgtgggc
 240
 acagttcttg cctcgccga catgggggtcc tgggacttgg ccggggcctg ggtggccaga
 300
 cgcggttctt ccccgagttc cgtcgcgagg aatcttcga gggcacagtt cgagttgttc
 360
 tgccgcacgc gt
 372

<210> 1438

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1438

Met Ser Met Leu Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
 1 5 10 15
 Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
 20 25 30
 Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
 35 40 45
 Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
 50 55 60

<210> 1439

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
 60
 tgcttctttc cacaatgtag acttaaaaaa atcgccgtaa acattttacc atatgattga
 120
 gtcagggtgtg gggagtcgca gtaaaccattt taccatgtga ttgagtcatg ggtggggagt
 180
 cgcggaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt
 240
 ggtctgtctt cctgggtaat gtcacatgga gacccagggg atctgccatc agctgtgtgc
 300
 agtgggttaa caagacgacg gggaacttca gagtgcaggc agtctctatc tttggcagat
 360
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
 420
 cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c
 471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
		20						25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
		35					40					45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
		50				55					60				
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65					70				75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
			85					90					95		
Val	Lys	Ile	Leu	Ser											
			100												

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnngagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg
 60
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
 120
 accgcagctc aactcaccg cacggcagct cactctcacc gcacggcagc tcacactcac
 180
 cacacagcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac
 240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgccca caactaatgg tcgccatcgg caatgcgagc
 60
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac cgtctctgcg
 120
 gaagccgcta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

1	5	10	15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln			
	20	25	30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala			
	35	40	45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met			
	50	55	60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala			
65	70	75	80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala			
	85	90	95

<210> 1445

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1445

naccggttca ccggggaggg cttcgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcggttcg gacttcgacg cattcatctc cggaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt gggtcttttcg agccgggtca
180
gaggtttatg agctggccnt ccccgagga gtcgtgttcg ccatgcaaag cgccctcgttg
240
agggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

<210> 1446

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1446

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val			
1	5	10	15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe			
	20	25	30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser			
	35	40	45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu			
	50	55	60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu			
65	70	75	80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu			
	85	90	95

Arg Leu

<210> 1447

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1447

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
 60
 ggtaatatct ccattgccca ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac
 120
 gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
 180
 ctctacgggg ctggcgggtgc cgaccagggtt tgggttggtt cgggcaacaa taccttcgtg
 240
 ttgcgcgcg tttccgactc ggcgcgcaaa gcggcgcgacc ggatcatgga cttcaccagt
 300
 ggccaggaca agatcgatct gtccgggac acccatgggt cgggcctgac cttcgtcaac
 360
 gcg
 363

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

Xaa	Gln	Asn	Gln	Lys	Ile	Asn	Leu	His	Asp	Gly	Ser	Phe	Ser	Asp	Val
1				5					10					15	
Gly	Gly	Met	Val	Gly	Asn	Ile	Ser	Ile	Ala	Gln	Gly	Val	Thr	Ile	Glu
			20				25						30		
Asn	Ala	Val	Gly	Gly	Ser	Gly	Asn	Asp	Leu	Leu	Ile	Gly	Asn	Asp	Ala
		35				40					45				
Ala	Asn	Glu	Leu	Arg	Gly	Gly	Ala	Gly	Asn	Asp	Ile	Leu	Tyr	Gly	Ala
		50				55					60				
Gly	Gly	Ala	Asp	Gln	Val	Trp	Val	Gly	Ser	Gly	Asn	Asn	Thr	Phe	Val
65				70					75					80	
Phe	Ala	Ala	Val	Ser	Asp	Ser	Ala	Pro	Lys	Ala	Ala	Asp	Arg	Ile	Met
			85					90					95		
Asp	Phe	Thr	Ser	Gly	Gln	Asp	Lys	Ile	Asp	Leu	Ser	Gly	Ile	Thr	His
			100				105						110		
Gly	Ser	Gly	Leu	Thr	Phe	Val	Asn	Ala							
		115					120								

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

aggcgctacc agattatggg ctgcccgcacc tcaatgacat gcgcttgagc ctgcatgaat
 60
 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg
 120
 ggaatgtacg tgtcaggagg agggagggtg cctacaaccc tttggtactg gcgtttgtga
 180
 ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgcacg cttggggcggc gtttttctga acgcaatccc gccctggcac
 360
 cctttcttgc cgattccagg ccaggaccog gacgtcgagg gtctattgaa agtctttgcc
 420
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgaggtt gaccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1450

Met	Arg	Leu	Ser	Leu	His	Glu	Ser	Leu	Ser	Gln	Ser	Arg	Leu	Ala	Ile
1				5					10					15	
Glu	Arg	Phe	Ile	Gln	Ala	Tyr	Glu	Pro	Arg	Leu	Gly	Asn	Val	Arg	Val
			20					25					30		
Arg	Arg	Arg	Glu	Gly	Ala	Tyr	Asn	Pro	Leu	Val	Leu	Ala	Phe	Val	Ile
			35				40					45			
Glu	Ala	Thr	Val	Val	Ile	Asp	Gly	Val	Ile	Gln	Pro	Val	Val	Phe	Asn
	50					55				60					
Ala	His	Leu	Val	Gly	Gly	Gly	Thr	Gly	Arg	Val	Cys	Tyr	Leu	Met	Phe
65					70				75					80	
Phe	Glu	Leu	Phe	Tyr	Gln	Ser	Glu	Leu	Ser	Ala	Leu	Arg	Thr	Leu	Gly
			85					90					95		
Arg	Arg	Phe	Ser	Glu	Arg	Asn	Pro	Ala	Leu	Ala	Pro	Phe	Leu	Ala	Asp
			100					105					110		
Ser	Arg	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Ser	Ile	Glu	Ser	Leu	Cys	Leu
		115				120					125				
Ser	Pro	Arg	Ala	Pro	Ala	Pro	Glu	Ala	Cys						
		130				135									

<210> 1451

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1451

aggcctctgg cgagttgatc tacagcttcg gacccgggtg tatggctact ggcgtcaagt
 60
 acacgaacac agtttgact cctgtgggag actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaacccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctgtaacat taaggagaag cacggcttct
 240
 tcacggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggaacaagga gtggaactct gtggac
326

<210> 1452

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1452

Met	Ala	Thr	Gly	Val	Lys	Tyr	Thr	Asn	Thr	Val	Cys	Thr	Pro	Val	Gly
1				5				10					15		
Asp	Tyr	Glu	Val	Val	Leu	Thr	Asp	Ser	Trp	Gly	Asp	Gly	Trp	Asn	Pro
		20					25					30			
Gly	Ser	Tyr	Leu	Asn	Met	Tyr	Asp	Ser	Ser	Asp	Asn	Leu	Ile	Gln	Glu
	35					40					45				
Phe	Thr	Met	Asp	Tyr	Asp	Ala	Ser	Ser	Arg	Asn	Ile	Lys	Glu	Lys	His
	50				55					60					
Gly	Phe	Phe	Thr	Val	Ala	Ser	Thr	Thr	Ser	Ser	Gly	Thr	Val	Trp	Lys
65				70				75					80		
Ile	Met	Ala	Asn	Lys	Lys	Val	Asp	Lys	Glu	Trp	Asn	Ser	Val	Asp	
			85					90					95		

<210> 1453

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1453

cggcgcgcgc gcccacgtg caccgcgtgc atggtccttc gaggacgcgc atctgcagcc
60
cccgtccccc gcaaacctcc aggcgggaga gctccggcca aggcgcgtgc atcacatgat
120
acaggagggg catgcacacg ctacgtgca cacagcctca aacacgtca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactgcct atagaaatgt gcaaacacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcacccacac ggacac
326

<210> 1454

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1454

Met	Val	Pro	Arg	Gly	Arg	Ala	Ser	Ala	Ala	Pro	Ala	Pro	Arg	Lys	Pro
1				5				10					15		
Pro	Gly	Arg	Arg	Ala	Pro	Ala	Lys	Ala	Ala	Ala	Ser	His	Asp	Thr	Gly
		20					25					30			
Gly	Ala	Cys	Thr	Arg	Ser	Arg	Ala	His	Ser	Leu	Lys	His	Ala	His	Pro
	35					40				45					
Tyr	Ile	Gln	Glu	Cys	Val	Asn	Ala	Leu	Arg	Cys	Thr	Gly	Gln	Arg	His

50 55 60
 Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
 65 70 75 80
 Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
 85 90 95
 Thr Asp

<210> 1455
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1455
 gatccagtca aaaaagcatg tggggttgct cacgctgggt ggaaaggtag tttgttgggt
 60
 gttgctatgg ctacagtga tgctatgata gcagaatatg gctgccgttt ggaaaaactt
 120
 tgggtggacct tggacccttc agtggggacct ggctgtttta ctcttcagg ggaatcagca
 180
 gaggcatttc ataatttca tctgcatgt gtacaactat ttgattcacc aaatccctgt
 240
 atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
 300
 ctttccaaac tgac
 314

<210> 1456
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1456
 Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
 1 5 10 15
 Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
 20 25 30
 Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
 35 40 45
 Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
 50 55 60
 Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
 65 70 75 80
 Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
 85 90 95
 Cys Phe Leu Pro Pro Ser Lys Leu
 100

<210> 1457
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgccaga accttctctg cccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca cttagcctgtc cctacaccct cccagggaaa
 180
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtgggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcactgggct gcctaccac tgcccaagt cctcaagtca
 420
 acacattcct gcactgn
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1			5					10				15			
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
		20					25				30				
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
		35				40				45					
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50				55				60						
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65				70				75			80				
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Ala	Tyr	Pro	Leu	Pro	Lys
			85				90				95				
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
		100					105								

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagaggtca ccggccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgaccgc
 60
 gccgtactca tcgtttcttc ggagaagatc aagcgggagc tgggtggaa cccgacgcgc
 120
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgtcgagcat gccctccac tccccgatcg ccatgagctg gcgan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
 nnaagcttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
 60
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
 120
 gaaaatgact gggtaggctt tgaaaaaat tggaaagagg ttgttgcat atcccgtaga
 180
 gaagcacaata ttcgcgggtga agcgcttaat ctaacgcctt atgatgcgat gcttgataag
 240
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaagg aaagacgtgg
 300
 ttacctacgt taattgaaaa agcggttagaa aagcagcaat cagaatctat cattatgcca
 360
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

65 70 75 80
 Phe Glu Pro Gly Thr Thr Thr Val Ser Leu Asn Thr Leu Phe Ser Lys
 85 90 95
 Val Lys Thr Trp Leu Pro Thr Leu Ile Glu Lys Ala Leu Glu Lys Gln
 100 105 110
 Gln Ser Glu Ser Ile Ile Met Pro Ser Gly Thr Phe Ser Thr Ala Asn
 115 120 125
 Gln Lys Ala Leu Gly Leu Glu Ile Met Lys Leu Leu Lys Phe Asp Phe
 130 135 140

<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
 60
 gccaaagtca tgggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
 120
 gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgcctt ggaaaccttc
 180
 gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
 240
 ctgcacaacc tgtggaaact gcgcgagtac atctcgaga ctatttccca ctggacgccc
 300
 tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
 360
 gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
 420
 a
 421

<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

Xaa Ala Phe Gln Ser Lys Leu Asp Leu Thr Ala Phe Glu Phe Phe Ser
 1 5 10 15
 Asp Lys Ala Leu Ala Lys Val Met Gly Arg Gly Asp Val Pro Ala Pro
 20 25 30
 Phe Glu Thr Glu Cys Pro Phe Tyr Ala Leu Leu Glu Phe Glu Ala Thr
 35 40 45
 Thr Glu Glu Val Ala Asn His Ala Leu Glu Thr Phe Glu His Cys Val
 50 55 60
 Glu Gln Gly Trp Val Leu Asp Gly Val Met Ser Gln Ser Glu Thr Gln
 65 70 75 80
 Leu His Asn Leu Trp Lys Leu Arg Glu Tyr Ile Ser Glu Thr Ile Ser
 85 90 95
 His Trp Thr Pro Tyr Lys Asn Asp Ile Ser Val Thr Val Ser Lys Val
 100 105 110
 Pro Ala Phe Leu Lys Glu Ile Asp Ala Ile Val Val Ser Ile Thr Arg

115 120 125
 Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala
 130 135 140
 <210> 1465
 <211> 424
 <212> DNA
 <213> Homo sapiens
 <400> 1465
 gtgcacgggtc tttgagctgc aattcccagg aatcaggggc cataggcggt agatggcatg
 60
 cagcctctcg ggcgggaaag tggctctacag tgctgtctg cccgggcagg cagctcgtag
 120
 gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca
 180
 caacctcacc gaattcaaac tccggtggat tcccacgcc gagcagtgga aggcggaaaa
 240
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg
 300
 gaccttgccc acggaagttt tcggtcaagc acccgaattc gacttcccat atatgaaact
 360
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
 420
 cacg
 424

<210> 1466
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1466
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
 1 5 10 15
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
 20 25 30
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
 35 40 45
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
 50 55 60
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
 65 70 75 80
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
 85 90 95
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
 100 105 110
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
 115 120

<210> 1467
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1467

nacgcgtgac ggcaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcaaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtaactatg cgctgtgct gatggctcatg acaacgtgga atgccacgat cctaggcccc
 240
 gccaaactcgg tgcattgagaa ccgcataatac tgcttcggcc tcgtgtgtgg cgactcgtac
 300
 cctcttgtgc cgcttgagat ttggttccag acgcgcatac acttgccgtg cgtcgatgcc
 360
 cacacggggc gcgtcatgcc cgatcagttc tcgccccctc tgcatggggc tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
		20						25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
		35					40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
	50					55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65				70					75					80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
			85						90					95	
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
		100						105						110	
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115						120							

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgatc tttctatgac attaattatt
 180

tcagggatcg cgacttttctt gcaatgtaaa aaagttggtc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttggtgt cgtaatcgca
 360
 ggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgta caggaatcgt cgttctgttg attggtctac cattaatg
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1			5					10						15	
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
		20						25					30		
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
		35					40					45			
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
	50					55					60				
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65					70					75				80	
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
			85						90					95	
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
			100					105					110		
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
		115					120					125			
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
	130					135					140				
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145				150						155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttget gtggctcggc
 60
 gttatcgatc agccgctgac gattttgcac accaatctgg cgggttatat cggcattgtg
 120
 tacgcttata tgcggtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtg aggcctcact ggatctcggg gcccgctccg tgaaaacggt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattatc ggggggtcga tgctggtgtt tatccccggc
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcgggggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tgttggttaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgtcctcagc tttcttgga aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgctgagtt tcttccacca
300
gtccacctt tttataagca atttgggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

	20		25		30										
His	Lys	Glu	Thr	Phe	Ser	Lys	Lys	Ala	Glu	Asp	Thr	Thr	Cys	Glu	Ile
	35						40					45			
Gly	Thr	Gly	Ile	Leu	Ser	Leu	Ser	Asn	Val	Ser	Lys	Arg	Thr	Glu	Tyr
	50					55					60				
Trp	Asp	Asn	Val	Pro	Ala	Glu	Tyr	Lys	His	Phe	Lys	Phe	Ser	Asp	Leu
65					70					75				80	
Leu	Asn	Asn	Lys	Leu	Glu	Phe	Glu	His	Phe	Arg	Gln	Phe	Leu	Glu	Thr
			85						90					95	
His	Ser	Ser	Ser	Met	Asp	Leu	Met	Cys	Trp	Thr	Asp	Ile	Glu	Gln	Phe
			100					105					110		

Arg

<210> 1475

<211> 389

<212> DNA

<213> Homo sapiens

<400> 1475

accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
60
gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gtcacaaaag
120
ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtcacagtc attatcaaag accgcattga agtcctgttg cggcgggcga cccggcggca
240
tttctccggc agggggtggt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtattt tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtggtgtc
389

<210> 1476

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1476

Met	Val	Leu	Ala	Pro	Val	Arg	Pro	Asn	His	Ser	Ser	Thr	Ser	Ile	Ser
1			5					10						15	
Ser	Ser	Leu	Lys	Thr	Arg	Pro	Ser	Ser	Gly	Gln	His	Cys	Ser	Lys	Ser
		20						25				30			
Trp	Cys	Trp	Leu	Ser	Val	Ser	Val	Pro	Arg	Gly	Lys	Gly	Thr	Phe	Ala
	35					40					45				
Gln	Ala	Arg	Val	Val	Gln	Val	Ile	Ile	Lys	Asp	Arg	Ile	Glu	Val	Arg
	50				55				60						
Leu	Arg	Arg	Ala	Thr	Arg	Arg	His	Phe	Ser	Gly	Arg	Gly	Cys	Phe	Glu
65				70				75					80		
Asn	Tyr	Pro	Cys	Tyr	Thr	Ser	Arg	Pro	Ile	Phe	Pro	Cys	Pro	Gly	Met
			85					90				95			

Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120
 <210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens
 <400> 1477
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 ttcttcctt atttgctggg ccaaacggac ggccaaccta aagatgcca atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcgccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcy
 240
 tggatgacgg tagtgcctgg ggcatgctt ggccaaatcg gcttaccggg cgcggggttc
 300
 ggttttggtt ggccctccaa cggcgcaggt acccccgcgc cgcaaggggt gatcctgagc
 360
 ggtttctccg gttccccgcg tacgcccga cgccatgcca agggggattt caaagggttac
 420
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

145 150
Asp Trp Asn Gly Lys Arg
 165

155 160

<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1479
acgcgtgtgg agctggcacc atgaaagcac gatgtgcac actcatagag gcaggcacac
60
ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca
120
cgctgggctt tttttgtttg ctgttttggg tgggggtgtgc tagtgcagtg tccggtgtac
180
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctggtaaac
240
aaatgccaaag tttgacaaaa aacagtgaag taaagcaaaa gattttgaaa aatgcttcat
300
catgtcagaa ggaaagaacc cttttcacgg gtgcttgccc acatttcctt gccagcctg
360
agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg
420
t
421

<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1480
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
1 5 10 15
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
20 25 30
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser
35 40 45
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
50 55 60
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
65 70 75 80
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
85 90 95
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
100 105 110
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
115 120 125
Glu Asn Tyr Ile Arg
130

<210> 1481
<211> 545

<212> DNA

<213> Homo sapiens

<400> 1481

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 120
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgaccgggt
 180
 tcgacgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc
 240
 gagaacccag tggtaaggc cattgccgat gcgttgcgc acgtcaatga ccccgagatc
 300
 aaacgccccca ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
 360
 gctttcgtcc gcatectgct gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
 420
 caggccaccg aggctgtgag cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
 480
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 540
 cgcgt
 545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
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His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20					25					30			
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
	35					40					45				
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
	50				55					60					
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65				70				75					80		
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
			85				90						95		
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
				100											

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

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 120
 gcatcctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa
 180
 ggcggtacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg
 240
 tatcgtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac
 300
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttctgac
 360
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgccta ctggaagccc
 480
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcttgggtgct
 540
 aatcctggag catgacacac caatcccca gcaactgcac accccgggca gcaatgggag
 600
 ctactacgga gagaagacaa cgcgt
 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5				10						15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
		20					25						30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55					60				
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70						75				80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90						95	
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
		100					105						110		
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130					135					140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145					150					155				160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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ctgttctctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttacttctga atcaccgtct aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaag tccaattggg tatggtggga ccttcctatg
240
ccagcccaga gaaaatctgc ttctgccgat ttgattgaag aaaatcctag cagcgtaaag
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aagggttagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcaccga tagctttgga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcaactaacg
660
ggtgatggtg ttgtagtgcc ggttgatcc cacatagcca ctcatatttt tgacccagtg
720
atggagcgtg tgtttgagga tgcggcggga ctgcttaagc aaatcgcata gcatcgtttt
780
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840
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggccctcttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaatt tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
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1140
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1200
caaatacctg tgctgacct cagcataatg ttggtctg gcttcacacc agactaagt
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttg
1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
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1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatc
 1560
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 1620
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 1680
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 1740
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 1860
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 1920
 gtgagaggtg gtcttgttgt cgcggtgccg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtc ttaagctccc
 2040
 gcagtcgctt ctgcaggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
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Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
			20					25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35				40						45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
	50					55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65					70				75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
	115					120						125			
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
	130					135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145				150					155					160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165					170					175		
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
	180						185						190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
	195						200					205			
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		240
	245	250
		255

<210> 1487

<211> 823

<212> DNA

<213> Homo sapiens

<400> 1487

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ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
120
catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
180
gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
240
ttcctggggc ggtgaggtca ggcagggagg tgggtgcgag gtcattggggc cgcaggcaaa
300
cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
360
gtggtgtgtc ttcctgcaag tggcctgcct ttgggagcat cagccctttc tctggggac
420
tgggagaggg cggcagtgag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
480
cacaggcct ctacaggacc cagatcctga tcttgtcaga tctgcacgcc cgtggggagg
540
tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtggtcag
600
gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
660
cccctacat tctggggca cccactgtag gccaggccct gtgccggatc tgatgatata
720
gtgatgacta agtcacagtc cctgcctctg aggccccat gatgtgccgg gacagccaag
780
caacccaata tgtaaaatc cagtgtcagg acccnaggag aag
823

<210> 1488

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1488

Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu	
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Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu	
20	30
Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg	
35	45
Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His	

50 55 60
 Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
 65 70 75 80
 Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
 85 90 95
 Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
 100 105 110
 Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
 115 120 125
 Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
 130 135 140
 Ala Leu Gly Arg Ala
 145

<210> 1489

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1489

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 120
 gccttcgccc cggtcgggcg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
 180
 attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
 240
 cgcgtaccgg cgccgcgcat cctgggtggtg ggcgacatgg gcgaagtcgg cgcacagggg
 300
 aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
 342

<210> 1490

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1490

Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
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 Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
 20 25 30
 Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
 35 40 45
 Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
 50 55 60
 His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
 65 70 75 80
 Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
 85 90 95
 Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
 100 105 110
 Thr Arg

<210> 1491
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1491
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 120
 tgggggtcag gtcccactcc caaaggagta gccatcacc acgagtcggc ggtcaatag
 180
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
 240
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 300
 ttggtgttgc catctccagc agacaaacgt gat
 333

<210> 1492
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1492
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 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
 20 25 30
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
 35 40 45
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
 50 55 60
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
 65 70 75 80
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
 85 90

<210> 1493
 <211> 1316
 <212> DNA
 <213> Homo sapiens

<400> 1493
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 120
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
 180
 gacgggcggt ttgaaggccg ccggtgccc gacggtgacg ccaagcagag atcaccaaag
 240

atgaggcaga gacccctcc tcgccgggac atgaccattc ctgaggcct caacctgccg
 300
 aagccgcccc tccccccca agtggaggaa gagtattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggtgat cgagaaaaac
 420
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
 480
 attgacaagt acaagaagac gagcaacgcg tcgagacca actttctggc tccccgtccc
 540
 cacgaggtga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
 600
 gaagccacgg gcccctcccg gcccctgcct gacgcaccgc atggtgtcat ggactcgggg
 660
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 720
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 780
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 840
 gagcggcaga ggacggagca gctccggggc cccactcca agcctccggg cgtgattttg
 900
 ccgatgatgc cagccaaaca catcctcca gcccgggaca gcaggaggcc agagcccaa
 960
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 1020
 gtcttgccca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
 1080
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc tcccccaaa acggagccac ctcagggcga agaccaagtc
 1200
 gacatctgca acctcaggag taagctcagg cctgccaaat cccaagacaa gtccttgttg
 1260
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 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5					10					15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35					40					45		
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
			50					55				60			
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

				85						90				95	
Leu	Asn	Leu	Pro	Lys	Pro	Pro	Ile	Pro	Pro	Gln	Val	Glu	Glu	Glu	Tyr
			100					105					110		
Tyr	Thr	Ile	Ala	Glu	Phe	Gln	Thr	Thr	Ile	Pro	Asp	Gly	Ile	Ser	Phe
		115					120					125			
Gln	Ala	Gly	Leu	Lys	Val	Glu	Val	Ile	Glu	Lys	Asn	Leu	Ser	Gly	Trp
		130				135				140					
Trp	Tyr	Ile	Gln	Ile	Glu	Asp	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Thr	Phe
145					150					155					160
Ile	Asp	Lys	Tyr	Lys	Lys	Thr	Ser	Asn	Ala	Ser	Arg	Pro	Asn	Phe	Leu
			165					170						175	
Ala	Pro	Leu	Pro	His	Glu	Val	Thr	Gln	Leu	Arg	Leu	Gly	Glu	Ala	Ala
			180					185					190		
Ala	Leu	Glu	Asn	Asn	Thr	Gly	Ser	Glu	Ala	Thr	Gly	Pro	Ser	Arg	Pro
		195				200						205			
Leu	Pro	Asp	Ala	Pro	His	Gly	Val	Met	Asp	Ser	Gly	Leu	Pro	Trp	Ser
		210				215					220				
Lys	Asp	Trp	Lys	Gly	Ser	Lys	Asp	Val	Leu	Arg	Lys	Ala	Ser	Ser	Asp
225					230					235					240
Met	Ser	Ala	Ser	Ala	Gly	Tyr	Glu	Glu	Ile	Ser	Asp	Pro	Asp	Met	Glu
			245					250						255	
Glu	Lys	Pro	Ser	Leu	Pro	Pro	Arg	Lys	Glu	Ser	Ile	Ile	Lys	Ser	Glu
			260					265					270		
Gly	Glu	Leu	Leu	Glu	Arg	Glu	Arg	Glu	Arg	Gln	Arg	Thr	Glu	Gln	Leu
		275					280						285		
Arg	Gly	Pro	Thr	Pro	Lys	Pro	Pro	Gly	Val	Ile	Leu	Pro	Met	Met	Pro
		290				295					300				
Ala	Lys	His	Ile	Pro	Pro	Ala	Arg	Asp	Ser	Arg	Arg	Pro	Glu	Pro	Lys
305					310					315					320
Pro	Asp	Lys	Ser	Arg	Leu	Phe	Gln	Leu	Lys	Asn	Asp	Met	Gly	Leu	Glu
			325					330						335	
Cys	Gly	His	Lys	Val	Leu	Ala	Lys	Glu	Val	Lys	Lys	Pro	Asn	Leu	Arg
			340					345					350		
Pro	Ile	Ser	Lys	Ser	Lys	Thr	Asp	Leu	Pro	Glu	Glu	Lys	Pro	Asp	Ala
		355					360						365		
Thr	Pro	Gln	Asn	Pro	Phe	Leu	Lys	Ser	Arg	Pro	Gln	Val	Arg	Pro	Lys
		370				375					380				
Pro	Ala	Pro	Ser	Pro	Lys	Thr	Glu	Pro	Pro	Gln	Gly	Glu	Asp	Gln	Val
385					390					395					400
Asp	Ile	Cys	Asn	Leu	Arg	Ser	Lys	Leu	Arg	Pro	Ala	Lys	Ser	Gln	Asp
			405					410						415	
Lys	Ser	Leu	Leu	Asp	Gly	Glu	Gly	Pro	Gln	Ala	Val	Gly	Gly	Gln	Asp
			420					425						430	
Val	Ala	Phe	Ser	Arg	Ser										
			435												

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

agatctctgt cccgtagagg tgccacctca tcctccatga gagctgtgct ttgctttctt
60

ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtccggga
 120
 gagggcaggc cgcggacatg gggcatgtgg cgatgtgttt caccacccac tcccgcctga
 180
 agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctctgcagc
 240
 agaccacct cctcagcctc cttcccctga aggctgggca tggcctggac aaagggtgtc
 300
 ctctctgct gtgccatgct gacgtggca
 329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1				5					10					15	
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
		20						25					30		
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35					40					45			
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55					60				
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65				70					75					80	
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
			85					90						95	
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgacggt tggcggccga cttggaagcc gctgcagcac
 60
 ttgacgcggg gcgatctcga agcgttcggt cttggcctga cggtcgatgg ctgcggcgtg
 120
 ccgttgatcg cgcaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
 180
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
 240
 caagaagcgg atcccgcagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
 300
 gcagccttac gcgccgatg cagctcattc tttcgggcca cgcgt
 345

<210> 1498

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1498

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Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1             5             10             15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
      20             25             30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
      35             40             45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
      50             55             60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65             70             75             80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ala Ser Lys
      85             90             95
Ser Ala Ala Asn Arg Ala Pro Glu
      100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

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aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcat tctttggctg
180
gatgcacaat cacaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

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<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

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Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1             5             10             15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
      20             25             30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
      35             40             45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
      50             55             60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```


<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
 60
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 gggctcatga cgaccctcc tgaacctgt tcaaagggcg acggettacc attcctcgtc
 180
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgtg gtggtgccag
 360
 attcacggtt accgaaaccc ggtcctcgac gaggcctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttgccg actcacccat aaggccgagg ttgacgcgt catatcccta
 480
 gtgcgcctgg ccccggggcc cctcgaccgg atcttctcgg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaatcg ctgcaccgc agcgcgccgg
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

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145                               150                               155                               160
Leu Thr Arg Thr Arg
                               165

<210> 1505
<211> 556
<212> DNA
<213> Homo sapiens

<400> 1505
nngcgcgcgcg gtccttcaac accaccctga ctctcgaaata tctggagaat gtctacgttg
60
gtttcaatcg gtttgccgaa cagatggcca ggatggccgg cgctcggcg aaactggacg
120
acggggggccc cgaaactcgc tgacggcact aaaccttctt cccccggcgc aaccaccttg
180
gcttcnngca tgacgaagct cagcggggga gctcagcggg tgtcagctaa cggcggcaag
240
ctcaccgacg gtgtctccca gctctccgga gggctcacia ctttgtctca caagggccag
300
cagctcagcc aagggggccga tgggctggcc agcgggggtg cgacctacac cgatggcacg
360
gggaaggtcg tcgacggcat cgggcagctg tcggctgggt tgacgacgat ggatgagaag
420
atcgctgcgg ctaccgggaa aatcgatccc tcccagctcg acaaactcgc cgggtggggcc
480
ggacagcttg ctgatggcat cgaccagttc accggcaatc tgggtgggtta tcgtactgag
540
atccgccagt acgcgt
556

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<210> 1506
<211> 169
<212> PRT
<213> Homo sapiens
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<400> 1506																	
Met	Ser	Thr	Leu	Val	Ser	Ile	Gly	Leu	Pro	Asn	Arg	Trp	Pro	Gly	Trp		
1				5					10					15			
Pro	Ala	Pro	Arg	Arg	Asn	Trp	Thr	Thr	Gly	Ala	Pro	Lys	Leu	Ala	Asp		
		20						25					30				
Gly	Thr	Lys	Pro	Ser	Ser	Pro	Gly	Ala	Thr	Thr	Leu	Ala	Ser	Xaa	Met		
		35					40					45					
Thr	Lys	Leu	Ser	Gly	Gly	Ala	Gln	Arg	Leu	Ser	Ala	Asn	Gly	Gly	Lys		
	50					55					60						
Leu	Thr	Asp	Gly	Val	Ser	Gln	Leu	Ser	Gly	Gly	Leu	Thr	Thr	Leu	Ser		
65					70					75					80		
His	Lys	Gly	Gln	Gln	Leu	Ser	Gln	Gly	Ala	Asp	Gly	Leu	Ala	Ser	Gly		
				85					90					95			
Val	Ala	Thr	Tyr	Thr	Asp	Gly	Thr	Gly	Lys	Val	Val	Asp	Gly	Ile	Gly		
		100						105					110				
Gln	Leu	Ser	Ala	Gly	Leu	Thr	Thr	Met	Asp	Glu	Lys	Ile	Ala	Ala	Ala		
		115					120					125					
Thr	Gly	Lys	Ile	Asp	Pro	Ser	Gln	Leu	Asp	Lys	Leu	Ala	Gly	Gly	Ala		

130 135 140
 Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly
 145 150 155 160
 Tyr Arg Thr Glu Ile Arg Gln Tyr Ala
 165

<210> 1507

<211> 667

<212> DNA

<213> Homo sapiens

<400> 1507

agatctctta agatgtgctc attatcatga gaacagcgtg gaggaaccca cccccaggat
 60
 ccagttacct ccacttgctc tgccttggc acgtggggct tatggggatt acaattcaag
 120
 gtgagacttg ggtggggaca cagtgaaca tgaagtgtgc cacgctgggt ggatgacgcc
 180
 ctccctcccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
 240
 aagggcagaa tgtacaggaa cagagtgaaga ttgcgagggc ctggggctga gggaggggac
 300
 gcactagagg aaggcaaagg ggagcctcct ggggtgtgggg agcactttct gtcttggttt
 360
 tgggtggtggc tgcacagtgg cccacacccg tcagagctca cctgcctgca cccaggccct
 420
 ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
 480
 cgcaccggta cctgggggacc gggggctctc ggtgatcatc ccgagctcca agacagaagc
 540
 tggactacag ccgtgctgag tggaggggtt tgggtggctgg gtgcccgcct cctattgctc
 600
 ctgcagactc tggggtctcg ggcgccccca gtggggcaat gtgggctgct gcagggaaat
 660
 cacgcgt
 667

<210> 1508

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1508

Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly
 1 5 10 15
 Asp Ala Leu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
 20 25 30
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
 35 40 45
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
 50 55 60
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
 65 70 75 80
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

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<210> 1509
<211> 463
<212> DNA
<213> Homo sapiens
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<210> 1510
<211> 99
<212> PRT
<213> Homo sapiens
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<210> 1511
<211> 633

<212> DNA

<213> Homo sapiens

<400> 1511

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 60
 tcacgcgcca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt
 120
 ctggtacgag aggctctcaa cgaccttgac catgacaagg tagtatccat tctaccccg
 180
 ctctggaagt tcttcacgac agtggccaca cataccccac gttccgctat gagattcctg
 240
 tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggaggg
 300
 gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
 360
 gtcgcgcgag acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt
 420
 cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacggtg ccttacgctg
 480
 ccgtcgctaa ccattctctc cacctcgacg cgccgctcgt ttttggggcc ctteccaagc
 540
 ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
 600
 aggccatcgc tccggtgctc ttcttcaacg cgt
 633

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

Ala	Gly	Thr	Gly	Val	Lys	Ala	Met	Ala	Leu	Gly	Pro	Gly	Trp	Val	His
1				5					10					15	
Thr	Glu	Phe	His	Ser	Arg	Ala	Asn	Val	Thr	Gly	Asn	His	Leu	Pro	Asp
			20				25					30			
Phe	Phe	Trp	Ile	Asp	Ala	Glu	Val	Leu	Val	Arg	Glu	Ala	Leu	Asn	Asp
		35				40					45				
Leu	Asp	His	Asp	Lys	Val	Val	Ser	Ile	Pro	Thr	Pro	Leu	Trp	Lys	Phe
	50				55					60					
Phe	Ile	Ala	Val	Ala	Thr	His	Thr	Pro	Arg	Ser	Ala	Met	Arg	Phe	Leu
65				70					75					80	
Ser	Arg	Thr	Leu	Ser	Ser	Arg	Asp	Lys	Asp	Asp	His	Pro	Arg	His	
			85					90					95		
Thr	Pro	Gly	Gly	Glu	Ala										
			100												

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

acgcgtgaag ggggtggaatt tcaccacaga ggggacgcg gggttcctgt tcagaaatat
 60
 ttggctgtcc aatctcgtaa tgccttctg aatgacttgc tgggcctgcc tctgacacg
 120
 gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc
 180
 ttctgggata ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccc
 240
 tctgcaccgt ggccggagatg aaacttttgc gtccagcagc atcgtccgcg tctccgcag
 300
 tctgtctcgg gcccttgctg aacatcttcc gtgtccgggg gaactgggtg gagtgagggg
 360
 tgtactgcgc cccagcgggg cctgtggtgc cgggcgggc g
 401

<210> 1514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Asp	Ala
1				5					10					15	
Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe	Cys
			20					25					30		
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
		35					40					45			
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
		50				55					60				
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
65					70				75					80	
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
			85						90					95	
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala				
			100						105						

<210> 1515

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1515

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 agggccatca cggcaggagt cgattatcac ggcccgatta tggaccacac gccggaatcc
 120
 aactacgagc ctgacctgac cgacgatgcg acgtcgggcc cgctcgccgt cgctcattgac
 180
 gatcccgccc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat
 240
 gagacccatg tcaaagggtc aaccgcctt caccctctcg ttctgagca tcttcgcagc
 300
 acctatgccg ggcttgccca tccggctgtt atcgacaccc tcaagtcaat cggagtaaca
 360

gccatcgaac tactaccggt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc
 420
 ttatccgatt actgggggta caacaccctg gggttctttg cgccgcacgc tgcctactgc
 480
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatgggtgac gtctttccac
 540
 gaagccggca tcgaggtttt cctcgatgac gtctacaacc aactgggtga gggcggccat
 600
 gaaggaccga ctctgtcttt ccgcggcacc gatcacgagt cttattaccg cctcaccaac
 660
 gatcacgca atgactatga cgtcacgggt tgtggcaatt ctgtcgacac ctcccatccg
 720

<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

Xaa	Asp	Pro	Asp	Arg	Gly	Met	Arg	Phe	Asn	Pro	Ala	Lys	Leu	Leu	Leu
1				5					10					15	
Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
	35					40					45				
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65				70					75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85					90					95		
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100					105					110			
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
	115					120					125				
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135					140				
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145				150					155					160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165					170					175		
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180					185					190			
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
	195					200						205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn	
	210					215				220					
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225					230					235				240	

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1517

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<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518

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Ser	Gln	Ser	Asn	Glu	Ser	Asp	Asp	Val	Ser	Thr	Asp	Arg	Gly	Pro	Ala
			20					25					30		
Pro	Pro	Ser	Pro	Leu	Lys	Glu	Thr	Ser	Phe	Ser	Ile	Gly	Leu	Gln	Val
			35				40					45			
Leu	Phe	Pro	Phe	Leu	Leu	Ala	Gly	Phe	Gly	Thr	Val	Ala	Ala	Gly	Met
	50					55				60					
Val	Leu	Asp	Ile	Val	Gln	His	Trp	Glu	Val	Phe	Gln	Lys	Val	Thr	Glu
65				70						75				80	
Val	Phe	Ile	Leu	Val	Pro	Ala	Leu	Leu	Gly	Leu	Lys	Gly	Asn	Leu	Glu
			85						90				95		
Met	Thr	Leu	Ala	Ser	Arg	Leu	Ser	Thr	Ala	Ala	Asn	Ile	Gly	His	Met
		100						105				110			
Asp	Thr	Pro	Lys	Glu	Leu	Trp	Arg	Met	Ile	Thr	Gly	Asn	Met	Ala	Leu
		115				120					125				
Ile	Gln	Val	Gln	Ala	Pro	Val	Val	Gly	Phe	Leu	Ala	Ser	Ile	Ala	Ala
	130					135					140				
Val	Val	Phe	Gly	Trp	Ile	Pro	Asp	Gly	His	Phe	Ser	Ile	Pro	His	Ala
145				150						155				160	
Phe	Leu	Leu	Cys	Gly											
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<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens

<400> 1519

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cccacagtgg ttctgtctcc caaacaactg cttcctgaat ctaccctgc aggaaccacaa
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360
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420
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480
cctgtcgatt ttcaaacgt tttggaagac ttcactaaac agggcttcg tggtattgtc
540
cttgcacaca gaaaattgga gtcaaaactg acatggcata aagtacagaa tattagcaga
600
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag
660
caagaaaccc ctgcagtact tgaagatttg cataaagcca acattcgcac cgtcatggc
720
acaggtgaca gtatgttgac tgctgtctct gtggccagag attgtggaat gattctacct
780
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900
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aagttgatgt tgcattggc cgtgtttgcc cgtatggc acatgcagaa gacacagttg
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1320
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1560

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 1620
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 1680
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 1800
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 1860
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 1920
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 1980
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 2040
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 2076

<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

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Pro	Glu	Glu	Asn	Val	Cys	Asn	Glu	Met	Leu	Val	Lys	Ser	Gln	Phe	Val
			20					25					30		
Ala	Cys	Met	Ala	Thr	Cys	His	Ser	Leu	Thr	Lys	Ile	Glu	Gly	Val	Leu
		35					40					45			
Ser	Gly	Asp	Pro	Leu	Asp	Leu	Lys	Met	Phe	Glu	Ala	Ile	Gly	Trp	Ile
	50					55				60					
Leu	Glu	Glu	Ala	Thr	Glu	Glu	Thr	Ala	Leu	His	Asn	Arg	Ile	Met	
65					70				75					80	
Pro	Thr	Val	Val	Arg	Pro	Pro	Lys	Gln	Leu	Leu	Pro	Glu	Ser	Thr	Pro
				85					90					95	
Ala	Gly	Asn	Gln	Glu	Met	Glu	Leu	Phe	Glu	Leu	Pro	Ala	Thr	Tyr	Glu
			100					105					110		
Ile	Gly	Ile	Val	Arg	Gln	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met
		115					120					125			
Ser	Val	Val	Ala	Arg	Val	Leu	Gly	Asp	Arg	Lys	Met	Asp	Ala	Tyr	Met
	130					135					140				
Lys	Gly	Ala	Pro	Glu	Ala	Ile	Ala	Gly	Leu	Cys	Lys	Pro	Glu	Thr	Val
145					150					155					160
Pro	Val	Asp	Phe	Gln	Asn	Val	Leu	Glu	Asp	Phe	Thr	Lys	Gln	Gly	Phe
			165						170					175	
Arg	Val	Ile	Ala	Leu	Ala	His	Arg	Lys	Leu	Glu	Ser	Lys	Leu	Thr	Trp
			180						185					190	
His	Lys	Val	Gln	Asn	Ile	Ser	Arg	Asp	Ala	Ile	Glu	Asn	Asn	Met	Asp
		195					200						205		
Phe	Met	Gly	Leu	Ile	Ile	Met	Gln	Asn	Lys	Leu	Lys	Gln	Glu	Thr	Pro
	210					215						220			
Ala	Val	Leu	Glu	Asp	Leu	His	Lys	Ala	Asn	Ile	Arg	Thr	Val	Met	Val

225 230 235 240
 Thr Gly Asp Ser Met Leu Thr Ala Val Ser Val Ala Arg Asp Cys Gly
 245 250 255
 Met Ile Leu Pro Gln Asp Lys Val Ile Ile Ala Glu Ala Leu Pro Pro
 260 265 270
 Lys Asp Gly Lys Val Ala Lys Ile Asn Trp His Tyr Ala Asp Ser Leu
 275 280 285
 Thr Gln Cys Ser His Pro Ser Ala Ile Asp Pro Glu Ala Ile Pro Val
 290 295 300
 Lys Leu Val His Asp Ser Leu Glu Asp Leu Gln Met Thr Arg Tyr His
 305 310 315 320
 Phe Ala Met Asn Gly Lys Ser Phe Ser Val Ile Leu Glu His Phe Gln
 325 330 335
 Asp Leu Val Pro Lys Leu Met Leu His Gly Thr Val Phe Ala Arg Met
 340 345 350
 Ala Pro Asp Gln Lys Thr Gln Leu Ile Glu Ala Leu Gln Asn Val Asp
 355 360 365
 Tyr Phe Val Gly Met Cys Gly Asp Gly Ala Asn Asp Cys Gly Ala Leu
 370 375 380
 Lys Arg Ala His Gly Gly Ile Ser Leu Ser Glu Leu Glu Ala Ser Val
 385 390 395 400
 Ala Ser Pro Phe Thr Ser Lys Thr Pro Ser Ile Ser Cys Val Pro Asn
 405 410 415
 Leu Ile Arg Glu Gly Arg Ala Ala Leu Ile Thr Ser Phe Cys Val Phe
 420 425 430
 Lys Phe Met Ala Leu Tyr Ser Ile Ile Gln Tyr Phe Ser Val Thr Leu
 435 440 445
 Leu Tyr Ser Ile Leu Ser Asn Leu Gly Asp Phe Gln Phe Leu Phe Ile
 450 455 460
 Asp Leu Ala Ile Ile Leu Val Val Val Phe Thr Met Ser Leu Asn Pro
 465 470 475 480
 Ala Trp Lys Glu Leu Val Ala Gln Arg Pro Pro Ser Gly Leu Ile Ser
 485 490 495
 Gly Ala Leu Leu Phe Ser Val Leu Ser Gln Ile Ile Ile Cys Ile Gly
 500 505 510
 Phe Gln Ser Leu Gly Phe Phe Trp Val Lys Gln Gln Pro Trp Tyr Glu
 515 520 525
 Val Trp His Pro Lys Ser Asp Ala Cys Asn Thr Thr Gly Ser Gly Phe
 530 535 540
 Trp Asn Ser Ser His Val Asp Asn Glu Thr Glu Leu Asp Glu His Asn
 545 550 555 560
 Ile Gln Asn Tyr Glu Asn Thr Thr Val Phe Phe Ile Ser Ser Phe Gln
 565 570 575
 Tyr Leu Ile Val Ala Ile Ala Phe Ser Lys Gly Lys Pro Phe Arg Gln
 580 585 590
 Pro Cys Tyr Lys Asn Tyr Phe Phe Val Phe Ser Val Ile Phe Leu Tyr
 595 600 605
 Ile Phe Ile Leu Phe Ile Met Leu Tyr Pro Val Ala Ser Val Asp Gln
 610 615 620
 Val Leu Gln Ile Val Cys Val Pro Tyr Gln Trp Arg Val Thr Met Leu
 625 630 635 640
 Ile Ile Val Leu Val Asn Ala Phe Val Ser Ile Thr Val Glu Asn Phe
 645 650 655
 Phe Leu Asp Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln

660 665 670
 Gly Glu Tyr Arg Phe Ser Thr Thr Gln Pro Pro Gln Glu Ser Val Asp
 675 680 685
 Arg Trp Gly Lys
 690

<210> 1521
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1521
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 120
 gcgtaccatc cgatacacgc cagccttgac tgctgataca cccagccac tgcgcatcag
 180
 tgatttcaat ggcggttaca cagtctggta tcggactgtc gatatcatcg taataggcga
 240
 tcacattccc atttgcacgc tatgctgcga acttttgacc catgattatt atttcccgaa
 300
 tgcaaaccaa taaacagtgt tggcgcttga tgaatagccg ttctgcacca cggcggtaga
 360
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 373

<210> 1522
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1522
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 Tyr Tyr Asp Asp Ile Asp Ser Pro Ile Pro Asp Cys Val Thr Ala Ile
 20 25 30
 Glu Ile Thr Asp Ala Gln Trp Leu Gly Cys Ile Ser Ser Gln Gly Trp
 35 40 45
 Arg Val Ser Asp Gly Thr Leu Val Ala Pro Val Pro Pro Thr Phe Ala
 50 55 60
 Glu Leu Leu Val Glu Ala Gln Arg Val Gln Thr Gln Val Ile Asp Ser
 65 70 75 80
 Ala Cys Ala Ser Ala Ile Thr Ala Gly Phe Ser Cys Asp Ala
 85 90

<210> 1523
 <211> 525
 <212> DNA
 <213> Homo sapiens

<400> 1523
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cagcatggca ccgatgccga gaggagacac aaaaaactgc ctctgacagc tcttgetcaa
 120
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
 180
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttgttgag
 240
 aaggagatcg tggacctctt gtacggcata gctgaggtgg agattcccaa catccagaag
 300
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
 360
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta
 420
 aaggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttgacgca
 480
 gacatgtaca actttatggc caaagaaggg gagtatggca aattt
 525

<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

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Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
		20					25						30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
	35						40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
	50					55					60				
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65				70						75				80	
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
			85					90						95	
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
		100					105						110		
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
		115					120					125			
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
	130					135					140				
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145					150					155				160	
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
			165					170						175	

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

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 120
 ctgcgttttt ccctggacta tgaatatgaa ctgccgatgg cccagatgaa cggcggttta
 180
 tctggcatcg atacgggtctt ttgcttacc gatgaaaagt acggctacat cagctcatcg
 240
 ctgtgcaaac aggtcgcgca attcggcggt gaggtcaccg ggatgcttcg gatac
 294

<210> 1526

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1526

Val	His	Glu	Arg	Met	Asp	Leu	Ile	Arg	Gln	Ser	Val	Asp	Ala	Arg	Ile
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Asn	Val	Asp	Tyr	Trp	Ser	Gly	Leu	Leu	Val	Asp	Tyr	Thr	Ser	Gln	His
		20					25						30		
Gly	Val	Asp	Val	Leu	Val	Lys	Gly	Leu	Arg	Ser	Ser	Leu	Asp	Tyr	Glu
	35					40						45			
Tyr	Glu	Leu	Pro	Met	Ala	Gln	Met	Asn	Arg	Arg	Leu	Ser	Gly	Ile	Asp
	50				55						60				
Thr	Val	Phe	Leu	Leu	Thr	Asp	Glu	Lys	Tyr	Gly	Tyr	Ile	Ser	Ser	Ser
65				70					75				80		
Leu	Cys	Lys	Gln	Val	Ala	Gln	Phe	Gly	Gly	Glu	Val	Thr	Gly	Met	Leu
			85					90					95		

Arg Ile

<210> 1527

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1527

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 120
 acttcgccct ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgag
 180
 aagacattga cgcgctgggt tacgacgggt tgttcgagga cgccatgacc atctgtgtgg
 240
 aaagctacat cggccaacgac gacggcgggc aaggcgtgaa gctcgaagaa cagatctaca
 300
 tccacgaaca cagcatcgag ttgctctccg attatccgtt cgaccacgc ctgttgccgc
 360
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 371

<210> 1528

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1528

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Met Glu Met Leu Lys Ala Gly Arg Ser Phe Lys Glu Tyr Ala Glu Met
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Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
 20           25           30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
 35           40           45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
 50           55           60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
 65           70           75           80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
 85           90           95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
 100           105

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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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gtgggacttg cgtctgtccc ggctcagggc tcgccctccg tgggacttgc gctctgtccg
120
gtcaggggt cgcctccgt gggacttgcg ctctgtccgg ctcagggtc gccctccgtg
180
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240
cagggtcgc cctccgtggg acttgcgctc tgtccggctc agggctcgcc ctccgtggga
300
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360
gcggctcctt ccaccagcc ccatctccg gccggccatt tgtgaggccc tctgccactg
420
agggtgactg tttccaattc ctcatcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattggtct caccactctg cgaggagcac agcctcttct ccaccgtcca
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600
ccattcacg
609

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

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1           5           10           15
Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala
20           25           30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser
35           40           45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val
50           55           60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala
65           70           75           80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu
85           90           95
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala
100          105          110
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu
115          120          125

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<210> 1531

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1531

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agcgttggtgac tgggacgccg acgtgaaaaa agaagctgac gaggctctgg gggcgcccgc
120
acattcggca agcatgagga cggggagcat cgagaccgag acagctcggc gaaggaattt
180
cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctg tcaggtggtc ttcgggctcg acttcgtctc cgttcccggc accttcccag
300
tgcgcatggc caggtggttc aagtcggggc ggatcagtc taccgctgag ctcagctccg
360
gcttttcacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggatttttagc
420
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480
tcaccgagcg cggcgtttcc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgatccctt catagcgag ccgccgatat ggccccgag tgaggccctt cagttcgcgc
600
tgacgcatgc cgctctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
660
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720
cgagag
726

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<210> 1532

<211> 178

<212> PRT

<213> Homo sapiens

<400> 1532

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Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
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Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
      20           25           30
Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
      35           40           45
Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
      50           55           60
Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
65           70           75           80
Arg His Leu Pro Ser Ala His Gly Gln Val Gln Val Gly Ala Asp
      85           90           95
Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
      100          105          110
Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
      115          120          125
His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
      130          135          140
Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
145          150          155          160
Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
      165          170          175
Pro Glu

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<210> 1533

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1533

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natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg
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gagattattc acagcgaacg ggcgaccggc ggtgcgcgcg ttaacgtcct gctgacgctg
120
gttaaaatgc acgtcggctt gccgttgacg gcggtcggtc ttatcggcga agacagcgat
180
ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc
240
accacgtttg cccccacgtc gatgtcgcag gtgatgaccg atcccactgg gcagcgcacc
300
tttttccatt cgctgcgcgc caatcgctg ctgatctcc ccgcctttga tcgactcgac
360
gcgt
364

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<210> 1534

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1534

```

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

```

1           5           10           15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
20           25           30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
35           40           45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
50           55           60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
65           70           75           80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
85           90           95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
100          105          110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
115          120

```

<210> 1535

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1535

```

gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaattccgc
60
caatccctgg gggcccggtt gcggtccggc cagcggccag tctggcccg gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accggggccta tcgcccgggc ccatggctgc
180
aaaaaaactc ttcacagtct ggacattccc ttgtgtgtct atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtg ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccggt
360
actggccac
369

```

<210> 1536

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1536

```

Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
1           5           10           15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
20           25           30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
35           40           45
Ser Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
50           55           60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
65           70           75           80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```

85 90 95
 Lys Ala Cys Glu Met Glu Thr Ser Phe Pro Glu Pro Pro Glu Phe
 100 105 110

<210> 1537
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1537
 ccactcgagg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt
 60
 ctcggggctg ctgcacgtgt accagcgga gatcggcagc caggaggaca cctgcttgtt
 120
 cctcacgcgc cccggggaga tgggtggcca gctggccgtg ctacccagg agacctcgtc
 180
 ggcgtggtgg agacactgac ccaccaggcc cggggcgacca cgggtcatgc cgttcgggac
 240
 tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
 294

<210> 1538
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1538
 Pro Leu Ala Ala Pro Glu Pro Ser Arg Val Ser Gly Arg Gln His
 1 5 10 15
 Pro Val Arg Val Leu Gly Ala Ala Arg Val Pro Ala Glu Asp Arg
 20 25 30
 Gln Pro Gly Gly His Leu Leu Val Pro His Ala Pro Arg Gly Asp Gly
 35 40 45
 Gly Pro Ala Gly Arg Ala His Arg Gly Asp Leu Val Gly Val Val Glu
 50 55 60
 Thr Leu Thr His Gln Ala Arg Ala Thr Thr Val His Ala Val Arg Asp
 65 70 75 80
 Ser Glu Leu Ala Lys Leu Pro Ala Gly Ala Leu Thr Ser Ile Lys Arg
 85 90 95
 Arg Tyr

<210> 1539
 <211> 1015
 <212> DNA
 <213> Homo sapiens

<400> 1539
 acgcgttcgg gcgtcaggca cagcatctc aacagatgtg gctgacaccc aaggcagtcg
 60
 gcctcagtgc cctgtcaccc acctagaacc tgttcacagc atgtcatccg ggctgctctg
 120
 gccttgactg gacatgatta ttatcctta cacaccgtgg ctgctctaca ggccaagaaa
 180

caggctgctc agccaggggc aggagaaggt gggtcaggct ccccggggac ctcaggccct
 240
 gacgcaccc ggcctcacc taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggtggt gccatcttgc cctgttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcaggtct aggccagtca agaggggtggc tgagaagcag
 420
 gaggagcctc agagaccctc ccctcgaaag cactgggggt tccacctcac aagcggcagg
 480
 ttctgttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac catcgtccag gcctggccca ggagccggtg aggaacctgg ggctgttgtg
 600
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatccac catggcccag aggtgggacc tgtggctcct tggggggcca
 720
 gcacccccag tctaattgggt gcccctgcca ctctcctgag ttcccggtga gagtcccc
 780
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat
 840
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccggtat gacatgctat gaacagggtt taggtgggtg acagggcact gaggccgact
 960
 gccttgggtg tcagccacat ctgttgagat gcgtgtgctt gacgcccga cgcgt
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5				10					15		
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
		20						25				30			
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
		35					40				45				
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
	50					55				60					
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65					70					75				80	
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							
					85										

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct ccagaaaca agtgggaaag ggaagcttag
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cccgcgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc
120
gctatcgcg cgacgggtgc cggcggaacc gtccctggcc ctggacgcgc tgcccccgga
180
gctgctggtg cagggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgcccgc
240
cagtgtgccg cgcttggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgctgcccc
360
acaacgaaga caaagaggag ttcccgcgtg gcgccttggc gcgctactga ctgcgcgcgc
420
ccttcggccg caatctcacc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatgggtgctc caagaggcag cttgtggacc
600
tggtgatgga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc
720
tggtatgtga tgaaaaggaa gtggtcaagt tctcagctc acctgaccgc gtcttccagt
780
ggactgagag gggctgccga caggctctcc acctcttcac caactttggc aaggccatcc
840
gctacgtacc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtgac ccaactccagt gtgagggtca ggatccgtct gtccctagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccagggtg cagtggctca cacctgtggg
1020
atcctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatttt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cagcacagggt gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattggt ttgttattca tttaatgact ttccctgctg ttacctaat acaaattgga
1380
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1           5           10           15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20           25           30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35           40           45
Glu Trp Glu Phe Gln Lys Tyr Gly His
          50           55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgctc ctatcggtt
60
gagtcacaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accacaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcgtttg tttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt tttgcctct tcagatgggg tgtggcccc
300
cncnccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1           5           10           15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20           25           30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35           40           45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50           55           60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
          65           70           75           80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85           90           95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545

ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt
 60
 caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
 120
 cgtctctgtc tcaagcacct cgctgtttc caggttcaag gcctggatag tgcgagtgtc
 180
 gtactggtcg atcacttcca ccgagtggtc tgggtagccc cttgccattc gctttatgat
 240
 ctcaaccata gatgcatttg gcatgttcca gagcttgtag tccttaacga tctctctggc
 300
 gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
 360
 ac
 362

<210> 1546

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1546

Met	Val	Lys	Ser	Cys	Glu	Leu	Ala	His	Leu	Thr	Asp	Arg	Leu	Cys	Leu
1				5					10					15	
Lys	His	Leu	Ala	Cys	Phe	Gln	Val	Gln	Gly	Leu	Asp	Ser	Ala	Ser	Val
			20					25					30		
Val	Leu	Val	Asp	His	Phe	His	Arg	Val	Val	Trp	Val	Ala	Pro	Cys	His
		35					40					45			
Ser	Leu	Tyr	Asp	Leu	Asn	His	Arg	Cys	Ile	Trp	His	Val	Pro	Glu	Leu
	50					55					60				
Val	Leu	Leu	Asn	Asp	Leu	Ser	Gly	Val	Val	Glu	Asn	Leu	His	Ala	Ile
65				70					75					80	
Val	Arg	Met	Gly	His	Cys	Gly	Asp	Val	Pro	Ser	Arg				
				85					90						

<210> 1547

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1547

cgcggttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgctt
 60
 ctgccgcggt cggtgtggtt cagcgccgtg tcggcggtga acctggagcg cgagcgctg
 120
 cgcaaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
 180
 agcgtggtgt tgtggggggt gatgattgtc tggttgggcg cggcggtgat tccgttcctg
 240
 atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac
 300
 gggcttaaac gccagaagtt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg
 360

tggaacagca accggattgt caccaatata tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1548

Arg	Val	Ala	Thr	Pro	Glu	Asp	Pro	Ala	Ser	Ser	Arg	Leu	Gly	Glu	Ser
1				5					10					15	
Phe	Trp	Ala	Phe	Leu	Pro	Arg	Ser	Val	Trp	Phe	Ser	Ala	Val	Ser	Ala
		20					25					30			
Trp	Asn	Leu	Glu	Arg	Glu	Arg	Leu	Arg	Lys	Leu	Gly	Leu	Pro	Ala	Trp
	35					40					45				
His	Trp	Lys	Asn	Ala	Val	Leu	Ser	Ala	Trp	Met	Tyr	Ser	Val	Val	Leu
50					55					60					
Trp	Gly	Val	Met	Ile	Val	Trp	Leu	Gly	Ala	Ala	Val	Ile	Pro	Phe	Leu
65				70				75				80			
Ile	Ile	Gln	Gly	Val	Tyr	Gly	Phe	Ser	Leu	Leu	Glu	Val	Val	Asn	Tyr
		85				90						95			
Val	Glu	His	Tyr	Gly	Leu	Lys	Arg	Gln	Lys	Leu	Pro	Asn	Gly	Arg	Tyr
		100				105					110				
Glu	Arg	Cys	Ser	Pro	Arg	His	Ser	Trp	Asn	Ser	Asn	Arg	Ile	Val	Thr
	115					120					125				
Asn	Ile	Phe	Leu	Phe	Gln	Leu	Gln	Arg	His	Ser	Asp	His	His	Ala	
130					135						140				

<210> 1549

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1549

gtcgacaggc tccagggttc tgttttgtag tgcaccgcgt gtggtgcaac atgcgtctgg
 60
 gcacaccagc gtcgcccgtt tcctgttgta gtctttcttc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcocat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttcttgggca aactccttc taggattttg gtctcccttt
 240
 tctctctggt ctttgaccac cgctaccag caaactcttc catctagacc agccagcatt
 300
 ggtttcttcc actccccag ctgccgcgtg ggaggcgcca ctgcaaactt cctgggggtc
 360
 tcccagctgc tcagagate ccattgccctt cctgatcag ctccctgccc ggttctcatc
 420
 ccgacgcggc tgcattggata ttc
 443

<210> 1550

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1550
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1 5 10 15
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
 20 25 30
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
 35 40 45
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
 50 55 60
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
 65 70 75 80
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
 85 90 95
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
 100 105 110
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
 115 120 125
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
 130 135

<210> 1551
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1551
 ccattggatc cccacctctg gcactcaaca tgacttggct gccacacacc aggaacctc
 60
 agaggagcag ccagctggcc aagcaccctt gccctggccc tgcgggctcc acaaaagctg
 120
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
 180
 ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
 240
 gctccttctt ccatttggtc ctaacacagc ctcccagga gaccaggggc atcccnnnnc
 300
 cccnnc
 306

<210> 1552
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1552
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1 5 10 15
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
 20 25 30
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

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<210> 1553
<211> 657
<212> DNA
<213> Homo sapiens
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<400> 1553
atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcggggccac
60
acgctactca tcctggggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cgggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggg ccaaggcggc gcccatgctg
300
attgcccgtt ttggccatgg ctcagctgag ctggagaact gcctctatgt ggtgggggga
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcggga tggcgctcagc
480
aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgctat gacccctcgg agaacagggtg gacgatcaag
600
gccgagtgcc cccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
657

```

```
<210> 1554
<211> 219
<212> PRT
<213> Homo sapiens
```

```

<400> 1554
Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
 1              5              10              15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
      20              25              30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
      35              40              45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
      50              55              60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```

```

65          70          75          80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
      85          90          95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
      100          105          110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
      115          120          125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
      130          135          140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145          150          155          160
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
      165          170          175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
      180          185          190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
      195          200          205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
      210          215

```

<210> 1555
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 1555
acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
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ggaggagcct gccttgccgc gacggtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaaggggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556
 <211> 102
 <212> PRT
 <213> Homo sapiens

```

<400> 1556
Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1      5      10      15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
      20      25      30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
      35      40      45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
      50      55      60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

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<210> 1557
<211> 390
<212> DNA
<213> Homo sapiens
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```
<210> 1558
<211> 114
<212> PRT
<213> Homo sapiens
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```
<210> 1559
<211> 556
<212> DNA
<213> Homo sapiens
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<400> 1559

accggtggcg acggtatcgg tggcgcgtcg atccttgcct cggaatcctt cgctgcagag
 60
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcatggagaa gctgctcatc
 120
 gagtgcaccc ttgacctctt caacgcgggg gtagttgagg ccttgcagga tttcggtgcc
 180
 gccggaatct cctgtgccac ctccgagctg gccagtgtg gcgacgggtg catgcacgtc
 240
 gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc
 300
 gagtcccagg agcggatggc cgcgggtggtg cgccccgac agcttgaccg cttcatggag
 360
 atctgcgccc attgggggtgt cgtgccact gtcattggcg aggtcaccga caccggtcga
 420
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgaggac ggttgctcac
 480
 gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
 540
 aacgacgcta acgcgt
 556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25					30		
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55					60				
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65				70						75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85					90					95		
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
		100						105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
		115					120						125		
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135					140				
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150					155				160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165					170					175		
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
		180					185								

<210> 1561

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1561

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 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccattt tgcattgat tcatctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttgaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgttgtttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaagttc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcaccc
 420
 tcctcctgtg gctttaggtc tgacattgta tttgacctt actagt
 466

<210> 1562

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1562

Met	Ser	Asp	Leu	Lys	Pro	Gln	Glu	Glu	Asp	Ala	Lys	Arg	Ser	Ile	Pro
1				5					10					15	
Lys	Arg	Thr	Val	Arg	Val	Gln	Gln	His	Gly	Thr	Leu	Pro	Arg	Ala	Tyr
			20					25					30		
Gly	Ile	Lys	Leu	Val	Val	Thr	Lys	Gln	His	Ile	Gly	Asn	Leu	Lys	Gln
		35				40						45			
Arg	Leu	Val	Val	Pro	Ser	Asn	Ile	Tyr	Ile	Lys	Ser	Ile	Lys	Glu	Ala
	50				55						60				
Phe	Glu	Tyr	His	Leu	Thr	Ala	Leu	Trp	Pro	Tyr	Arg	Ser	Asp	Glu	Ser
65				70					75					80	
Met	Thr	Lys	Trp	Val	Ser	Ile	Pro	His	Pro	Val	Leu	Ile	Ser	Thr	Ser
			85					90					95		
Asn	Leu	Cys	Pro	Ile	Ser	Ser	Glu	Ser	Phe	Lys	Cys	Pro	His	Phe	Leu
		100					105					110			
Ser	His	Ile	Gln	Gly	Asn	His	Ile	Asn	Ser	Glu	Cys	Cys	Leu	His	Leu
		115				120						125			
Gly	Met														
	130														

<210> 1563

<211> 434

<212> DNA

<213> Homo sapiens

<400> 1563

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atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta
120
ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtggtt gctgtcggcg
180
ggtgtggttg tggtcacct gatgaccccc accgtgctgc aaaccgtcta ccacttcage
240
ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
300
gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
360
tgctgtggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatggttga
420
ataagtgtac gcgt
434

<210> 1564
<211> 132
<212> PRT
<213> Homo sapiens

<400> 1564
Leu Gly Gly Val Phe Gly Leu Leu Ser Val Tyr Leu Pro Arg Trp Leu
1 5 10 15
His Glu Thr Pro Ile Phe Ala Glu Met Gln Gln Arg Lys Thr Leu Ala
20 25 30
Ala Glu Leu Pro Leu Arg Ala Val Leu Arg Asp His Arg Gly Ala Ile
35 40 45
Val Leu Ser Met Leu Leu Thr Trp Leu Leu Ser Ala Gly Val Val Val
50 55 60
Val Ile Leu Met Thr Pro Thr Val Leu Gln Thr Val Tyr His Phe Ser
65 70 75 80
Pro Thr Val Ala Leu Gln Ala Asn Ser Leu Ala Ile Val Thr Leu Ser
85 90 95
Leu Gly Cys Ile Ala Ser Gly Ala Leu Ala Asp Arg Phe Gly Ala Gly
100 105 110
Arg Val Leu Val Thr Gly Trp Arg Cys Cys Trp Pro Leu Pro Gly Arg
115 120 125
Cys Ile Thr Ala
130

<210> 1565
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1565
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agagggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc
120
ctgcattcgg ccatttcttc ccaagaatca ccataaaggt tgtcaaaatc aaggaccctg
180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt taccctccgag ggagaaaagc
 240
 ggggtgggtgct cttgatgctc gacaacctct accgtcccag taccaccgt gcattggcga
 300
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1566

Met	Ser	Gln	Arg	Val	Ser	Gly	Ser	Gly	Thr	Tyr	Trp	Thr	Met	Lys	Ala
1				5					10					15	
Ile	Lys	Arg	Thr	Arg	Glu	Pro	Ala	Phe	Gly	His	Phe	Phe	Pro	Arg	Ile
			20					25					30		
Thr	Ile	Lys	Val	Val	Lys	Ile	Lys	Asp	Pro	Asp	Pro	Val	Ile	Leu	Glu
		35				40						45			
Val	Ile	Asp	Glu	Gln	Asn	Lys	Phe	Thr	Pro	Glu	Gly	Glu	Lys	Arg	Val
	50					55					60				
Val	Leu	Leu	Met	Leu	Asp	Asn	Leu	Tyr	Arg	Pro	Ser	Thr	His	Arg	Ala
65					70				75					80	
Leu	Ala	Asn	Gly	Gly	Val	Pro	Tyr	Leu	Arg	Ser	Lys	Ser	Val	Thr	Val
			85					90					95		
Asp	Leu	Val	Asp	Ser	Arg	Asp	Asn	Thr	Gly						
			100					105							

<210> 1567

<211> 917

<212> DNA

<213> Homo sapiens

<400> 1567

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 aagccgctgc actcctgggg gaccagttt gatgctcca ggaggataag tctgaagccg
 120
 gggttgggaag ggagcggaga ggcccaaaca gagcagcagg cagcgccctc tgctggcacc
 180
 ctggagacag cttcggctgc ggggcccctg cttctagtc ctccccagct ttcaggacac
 240
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtgggtggg tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgccca cagcgggggac ctccggagcta tgccttgata aggcaagtga ggttacatgt
 600
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat
 780
 gacagcagta cgaatcgtgg ctctcctgag gcctggggtt cctcatatgt aaaatggggg
 840
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag
 900
 ggctgaagag ctgggtc
 917

<210> 1568

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1568

Met	Gly	Pro	Ala	Leu	Pro	His	Val	Phe	Glu	Ser	Gln	His	Leu	Ser	Pro
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Leu	Leu	Cys	Ile	Cys	Gly	Ser	Gln	His	Cys	Leu	Pro	Pro	Tyr	Pro	Asp
			20				25						30		
Ser	Phe	Arg	Arg	Leu	Gly	Gly	Gln	Pro	Gly	His	Phe	Cys	Arg	Asp	Pro
		35					40					45			
Arg	Leu	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Gly	Gly	Leu	Glu	Gly	Arg	Gly
		50				55					60				
Pro	Ala	Ala	Glu	Ala	Val	Ser	Arg	Val	Pro	Ala	Glu	Gly	Ala	Ala	Cys
65				70					75					80	
Cys	Ser	Val	Trp	Ala	Ser	Pro	Leu	Pro	Ser	Gln	Pro	Gly	Phe	Arg	Leu
			85						90					95	
Ile	Leu	Leu	Glu	Ala	Ser	Asn	Trp	Val	Pro	Gln	Glu	Cys	Ser	Gly	Phe
			100					105						110	
Pro															

<210> 1569

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1569

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 aatgcgaagc ctgctgccac catcatctgg ttccgggacg ggacgcagca ggagggcgct
 120
 gtggccagca cgggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
 360
 acagccaacc cggagatct
 379

<210> 1570
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1570
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr
 1 5 10 15
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg
 20 25 30
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys
 35 40 45
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr
 50 55 60
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala
 65 70 75 80
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro
 85 90 95
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu
 100 105 110
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 115 120 125

<210> 1571
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1571
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 atcggcatct tcttcttctt gccaaagcggc caagccgtgc tccagtcttt ccagatggaa
 120
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttcgcaa cctgctggat
 180
 gacccacct acctgaattc ctccagcgc accgccgtgt tctcgggtgct ggtggcaggg
 240
 gtcgggatcg ccgtgtcact ggtctggcg atctttgccg accccatcac tccgtcgcca
 300
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg caccatgat cgccggc
 357

<210> 1572
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1572
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

```

      1           5           10           15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
65      70           75           80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1573

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gaattcccat tgatcatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
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tattgtacag attttgggaat cggtagcagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggt ataacacccg
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttgga
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgaccgcagt
300
gcagaaaatg aactggaaaa atgtttacta caaattt
337

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<210> 1574

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1574

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Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
65      70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85           90           95

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<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 catctcgttg ccgaaattgg ggccgatggg gtccatgttg ggcagtctga catgccggtc
 120
 gaccagggcc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
 180
 gcccattgtg aggccgcctt gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgccagccc gtggccgggt tgcgtcatcg gtgggggtgag cgcattccgat
 360
 gctcaagacg tagcccgggt gggatgtgac ggctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
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 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577

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 ccccatcctg cgggcttgcg cacggttgcg ctccaacccg gcgtcgcgca cgcgcgcacc
 120
 ttgcgcgttg ccggggcagg cttccccgct cgcggccagc gcgcgcgcgg cgatctggtg
 180
 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag
 240
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 287

<210> 1578

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1			5						10				15		
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
		20					25					30			
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
	35					40				45					
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70				75				80			
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85					90					95		

<210> 1579

<211> 2829

<212> DNA

<213> Homo sapiens

<400> 1579

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 120
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 180
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 240
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 420
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 480

ttgagtgatt tctgcaggc tatggaacac actgaagttc ttcagcttct cagccccca
540
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720
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ggaacctact ggtgtcatgt atataatgat cgagacagtc aagatagcaa gaaggtagaa
1080
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ggtcatcctg ataataaaga gcaaacaact gaccagcctt tggcgaagga caaggttgcc
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1620
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2100

gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga tcttcccaag
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 2280
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 2340
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 2400
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 2580
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 2640
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 2700
 ataaagttag acattgtgaa aaggcaaatt tgtatatgta gagaaagaat agtagtaact
 2760
 gtttcatagc aaacttcagg actttgagat gttgaaatta cattatttaa ttacagactt
 2820
 cctctttct
 2829

<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35					40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
		50				55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70					75				80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
				85					90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
		115					120					125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
		130				135						140			
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

1282

595 600 605
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
 610 615 620
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
 625 630 635 640
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
 645 650 655
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
 660 665 670
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
 675 680 685
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
 690 695 700
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
 705 710 715 720
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
 725 730 735
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
 740 745 750
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
 755 760 765
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
 770 775 780
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
 785 790 795 800
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
 805 810 815
 Asp Arg Leu Arg Ile Ser Glu Lys
 820

<210> 1581

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1581

gatecgcatc gcccgtttat tgacgaggtg accttcaccc gagagggcca tacctatcac
 60

cgggtgcccc aggtggctga cgctggctc gattcgggct cgatgccctt cgcccagtgg
 120

ggatacccg c atgtgccccg ttcgaaggag aagttcgagt cccactaccc ggggtgacttc
 180

atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcgggaacc
 240

ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag
 300

gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgccatccc gctcatggat
 360

tcccacggtg ccgacgcgct gcgttggttc atggcgccg acggctcccc atggagtgca
 420

cgacgc

426

<210> 1582

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1582

```

Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
 1           5           10           15
His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
      20           25           30
Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
      35           40           45
Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50           55           60
Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr
65           70           75           80
Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
      85           90           95
Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
      100          105          110
Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
      115          120          125
Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
      130          135          140

```

<210> 1583

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1583

```

nnacgcgtga aggggttatgg agatggttca gggagtaagg aaggtttcag ggatgggtta
60
gggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct
120
cctaagggaa taggttcagg gagtaaggca gggttcaggg atggtttagg gagttctggg
180
gaaatggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
240
ggttcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca
300
ggggatgagg caggttataa gaatgtttta gggggttctg ggaggaatcc attagggagc
360
gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgcatg gaatgaggca
420
ggttctaggc aaggctttgg gggaactagt
450

```

<210> 1584

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1584

```

Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

```

```

      1           5           10           15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala
      20           25           30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser
      35           40           45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser
      50           55           60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met
      65           70           75           80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly
      85           90           95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly
      100          105          110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu
      115          120          125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln
      130          135          140
Gly Phe Gly Gly Thr Ser
145          150

```

<210> 1585

<211> 596

<212> DNA

<213> Homo sapiens

<400> 1585

```

tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga
60
tctaataccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
120
ggcagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg
180
gaaggaaaga gcggcaggtc cagagaaacc ggctctccc aaaaagttat caaacactgg
240
tttagaaata cgctttttta ggaacgacag agaaataaag attcaccata caacttcagt
300
aaccctecta taacggtttt agaagatata agaattgatc cacagcccac ctctttagaa
360
cattacaaat ctgatgcata attcagtaaa aggtcttcta gaacgagatt tactgactac
420
cagcttaggg ttctgcaaga cttttttgac acaaagcgtt acccaaaaga tgatgaaata
480
gaacaactct ccaactgttct caatctgcct acccgggtta ttgttgatg gttccagaat
540
gctcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt
596

```

<210> 1586

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1586

```

Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

```

      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100          105          110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115          120          125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130          135

```

<210> 1587

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1587

```

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggcttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tgttcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcggtgctcc tgacagctca gacccagac cgcaggtgct cccgacagct cagacccccg
300
accgcggtg ctctgacag ctacagaccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcggtgctcc cgacagctca
420
gacccagac cgcggtgct cctgacagct cagacccag accgcggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

```

<210> 1588

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1588

```

Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

      35              40              45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
      50              55              60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
      65              70              75              80
Pro Asp Arg Gly Cys Ser
              85

```

<210> 1589
 <211> 407
 <212> DNA
 <213> Homo sapiens

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<400> 1589
aagcttgctg gggacaccct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
60
tccaccgggt ccactaacgc cgacatggct gctttcgtgc gaggcagggg aacgtctttc
120
tgectactcg ttgctgacca ccaagagggc gggcgtggac gggtcacgcg cagttggcag
180
gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgacg
240
gactggggct ggctgtcgat ggttgcgggg ctgctgttg tcaaggatcat caaggaggtc
300
ggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
407

```

<210> 1590
 <211> 135
 <212> PRT
 <213> Homo sapiens

```

<400> 1590
Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
1      5      10      15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
      20      25      30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
      35      40      45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
      50      55      60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
      65      70      75      80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
      85      90      95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
      100     105     110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
      115     120     125
Cys Gly Ile Leu Ser Glu Arg
      130     135

```

<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
 agatctctct ccctgagata acccaggctt tagaaccaaa gagctgagag accctgtccc
 60
 ttcagagagg cacttgacac tagaggagtc tctgggaagc agatggggat atgggacaga
 120
 cgcattcttga aaaagcccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgctgt ccctgcacag
 240
 aacgtccagc gagtctgac ttccagccg ctgccttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcg cccagcagt ctggcccagc ctgtccagta ctccttgac
 360
 tgtgggatcc ctggctgctc acgcccctga ggaccctcg gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
 1 5 10 15
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
 cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg
 60
 atgagaaatg agcccattga aggcaaacctc tcaactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagaccctg aatttgatgg tactgaagtt
240
ttaaaggagg atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggtg tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga
720
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaaag tcatggtcca
960
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag
1020
tgctttctga aacaacaaag ccaaacttcc attggtcagg taattcagga ggggtggggag
1080
gaccggctaa tactgtgaat tcttgtgtca tcggttgagg ttttacttga taccactagc
1140
tataagccta atctcataat gtatttcttt ttgaaactg atttgtttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagtttag acatcactgg
1320
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg
1380
tccattaaga aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt
1440
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
aagaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc
1560
tgtaaaatgc aagaaaatth aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
aaggcaata aacttggtac gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1 5 10 15
 Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20 25 30
 Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35 40 45
 Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50 55 60
 Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65 70 75 80
 Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85 90 95
 Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
 100 105 110
 Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
 115 120 125
 Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
 130 135 140
 Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
 145 150 155 160
 Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
 165 170 175
 Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
 180 185 190
 Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
 195 200 205
 Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
 210 215 220
 Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
 225 230 235 240
 Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
 245 250 255
 Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
 260 265 270
 Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
 275 280 285
 Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
 290 295 300
 Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
 305 310 315 320
 Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
 325 330 335
 Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
 340 345 350
 Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
 355 360 365

<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595

accggtcccg ctcacaggcc cacacctgct tctcctcctg ggcagggca gcctggtggg
 60
 gcatggcccg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg cccagccagg gagagcatct tcccgtggg accttccccg gggcggtca
 180
 tcccttgag atgtagggg cagctgagat ggtggcgcc ccattcctgc tgttcgccag
 240
 cctgggctgg gggtagtagg atcacccttg ggctgatgag gagcccggt cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgcccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
 cagcttgag agccagcatc aaggtcaggc ctcacttgcc caagaaagag gagtgaggag
 540
 gccactgga ggaacgcgt
 559

<210> 1596

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1596

Met	Leu	Ala	Leu	Gln	Ala	Gly	Thr	Glu	Asp	Arg	Val	Ser	Ser	His	Leu
1				5					10					15	
Leu	Ser	Thr	Gly	Ala	Gly	Pro	Ala	Glu	Arg	Arg	Trp	Pro	Cys	Leu	Glu
			20					25					30		
Ser	Pro	Ala	Ala	Phe	Cys	Arg	Gly	Pro	Val	Phe	Glu	Ser	Val	Ala	Trp
		35					40					45			
Ala	Arg	Pro	Leu	Pro	Trp	Phe	His	His	Phe	Pro	Asp	Cys	Asp	Pro	Pro
	50					55					60				
Leu	Gly	Asn	Cys	Pro	Arg	Pro	Gly	Leu	Leu	Ile	Ser	Pro	Arg	Val	Ile
65				70				75						80	
Leu	Val	Pro	Pro	Ala	Gln	Ala	Gly	Glu	Gln	Gln	Glu	Trp	Gly	Arg	His
			85					90						95	
His	Leu	Ser	Cys	Thr	Leu	His	Leu	Gln	Gly	Met	Ser	Arg	Pro	Gly	Glu
			100					105					110		
Gly	Pro	Ser	Gly	Lys	Met	Leu	Ser	Leu	Ala	Gly	Pro	Gln	His	Gln	Cys
		115				120						125			
Ser	Glu	Val	Ala	Met	Glu	Pro	Val	Pro	Arg	Gln	Val	Gly	Gly	Ser	Pro
	130					135					140				
Ala	Met	Pro	His	Gln	Ala	Ala	Leu	Pro	Gln	Glu	Glu	Lys	Gln	Val	Trp
145				150					155					160	
Ala	Cys	Glu	Arg	Asp	Arg										
					165										

<210> 1597

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc ctctgggcct acccataatc cttgggacct tgaacgggta
 60
 ccgggtgggtt ccgggtgggtg ttcagcagct agcttggtt cctttcaggc cccgttggt
 120
 ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg
 180
 atcaagccga cctacgggtc gacctccga tacggcggtta tcgctatggc ttcattcttg
 240
 gatactctg ggcctgctg ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt
 300
 gccggtcagc acgctatgga ccagaccagc attaatcagc ccaccccggc ggtcgttgag
 360
 gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
 420
 cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag
 480
 gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctgcctt acctgcttat
 540
 taccttattc agctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
 600
 ggcttacgc
 609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35				40					45				
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50				55					60					
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65				70				75						80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
			85					90					95		
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
		100						105				110			
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145				150				155						160	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

	165		170		175
Leu	Pro	Ala	Tyr	Leu	Ile
				Gln	Pro
				Ala	Glu
				Val	Ser
				Ser	Asn
				Leu	
	180		185		190
Ala	Arg	Tyr	Asp	Ala	Met
				Arg	Tyr
				Gly	Leu
	195		200		

<210> 1599
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 1599
 gcgtggccga cggctgctgt gtggtcagcg atctttatctt ttcttgatcg attcagaacc
 60
 cggcacctgc acgtgtggtt tctctgcttt tggtagggag cgtgcgtcgc gacctggatt
 120
 agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacagggtg ggttgatcca
 180
 gcatcgggag ccgggtccgc agtgatttcg gctccctttg ttgaggaatc atgcaaggcg
 240
 cttgtgcttt tcgcgtggc catcggcatg gggcgacgga tgacctcggg agttcagacg
 300
 gtgagcatgg ccgggtcttc ggcaattggt ttgcctttg ttgagaacat tatgtactac
 360
 gcccgtagc ataaactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcggt
 420
 gatgaagttg gtgctgttgc ggggagtgta tgcctcggtt gggcatccgc tgttcaccag
 480
 catgacgggt atcgggtctg cccttgggct gaggtcacga agttga
 526

<210> 1600
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1600
 Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly
 1 5 10 15
 Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe
 20 25 30
 Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
 35 40 45
 Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
 50 55 60
 Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
 65 70 75 80
 Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
 85 90 95
 Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
 100 105 110
 Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
 115 120 125
 Ala Glu Val Thr Lys Leu

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

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gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
60
atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
120
ttcttcccgg gcgccaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
180
ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc
240
gccaccgtcg gaatcttgct tcaggagccc ccgtcaccg aggacaaaac tgttcgcgag
300
aacgtcgaag aggccgtcgg cgacatcaaa gccaaagtgg cacggttcga ggaagtctcc
360
gccgagatgg ccaaccctga cgccgacttt gacgcctga tggcggagat gggtgagctg
420
cagaccgagc tcgataacgc caacgcg
447

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<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

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Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly
 1           5           10          15
Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala
      20          25          30
Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu
      35          40          45
Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu
      50          55          60
Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr
      65          70          75          80
Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile
      85          90          95
Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn
      100         105         110
Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln
      115         120         125
Thr Glu Leu Asp Asn Ala Asn Ala
      130         135

```

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
 60
 gaaatccttg aggcgtaacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg
 120
 cacgggtttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg
 180
 catcaagtcg cgttggttggc cgggatggtc aagggcccg cctattacaa cccgcggcgc
 240
 aatccggaac gtgcgctcga gcgtcgtaac ctgggtgctgg atgtgctgga acagcagggt
 300
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
 360
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggcacaacg ccagttgcgt
 420
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
 480
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
 540

<210> 1604

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
		50					55					60			
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85						90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100						105					110	
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
			115				120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
		130				135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp	
145					150				155					160	
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
				165					170					175	
Arg	Leu	Thr	Gly												
			180												

<210> 1605

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

acgcgttggt ggggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcgggata tgcactggga tattgcggcc catcgctgt gaccacacat
120
cgcagcgtg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtagcct gctgggtgcc gctgcccact acggcaagac
240
ccagcgtac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
300
tctttctcct tcacaaagta tttgtaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatacac tcccgggcca
420
aatgttg
427

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

Met	Thr	Ala	Ser	Ile	Arg	Gly	Arg	Val	Leu	Ser	Val	Ile	Met	Ala	Val
1			5					10				15			
Ala	Val	Ala	Leu	Gly	Leu	Ala	Val	Val	Ala	Gly	Gly	Thr	Gln	Gln	Ala
		20					25					30			
His	Ala	Ala	His	Arg	Asp	Phe	Leu	Arg	Ala	Asp	Ser	Thr	Gly	Thr	Cys
		35				40					45				
Glu	Trp	Asp	Gln	Val	Gly	Trp	Trp	Val	Gln	Arg	Cys	Asp	Val	Trp	Ser
	50					55					60				
Gln	Ala	Met	Gly	Arg	Asn	Ile	Pro	Val	Gln	Ile	Pro	Pro	Ala	Lys	Asn
65					70					75				80	
Gly	Gly	Asn	Ala	Gly	Leu	Tyr	Leu	Leu	Asp	Gly	Leu	Arg	Ala	Thr	Asp
			85					90						95	
Arg	Thr	Asn	Ala												
			100												

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

gcacggctcc gctcgggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtcaa
120
cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc
 240
 tttctgttgg cacccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
 300
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg
 360
 gacggaggcg aaggcacggg gcagtcgctg gtcgac
 396

<210> 1608
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 1608
 Thr Gly Lys Pro Phe Leu Leu Ala Pro Asp Ser Phe Lys Glu Ser Met
 1 5 10 15
 Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val
 20 25 30
 Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu
 35 40 45
 Gly Thr Val Gln Ser Leu Val Asp
 50 55

<210> 1609
 <211> 505
 <212> DNA
 <213> Homo sapiens

<400> 1609
 acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg
 60
 ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac
 120
 gcggccccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gctcatgagg
 180
 ttcgcggcgt aggacatcgt tacgtccagc atgggtggcg tctcagcaat gtcacagccg
 240
 gccttgtgga gggcgaggag ccgagcgcgc gtgcttcttg ctggcacgat gcgttcacgt
 300
 gctgcgttga tgtcgtcgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat
 360
 ggggtgaatt ggacggcccc ccctggccag cgagtcgttg gacgattcga ctggggacat
 420
 gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat
 480
 ggagcgagaa aaagcggggc tcgac
 505

<210> 1610
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1610

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1 5 10 15
 Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
 20 25 30
 Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
 35 40 45
 Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
 50 55 60
 Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
 65 70 75 80
 Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
 85 90 95
 Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
 100 105 110
 Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
 115 120 125
 Met

<210> 1611

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1611

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
 60
 aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtattaggt
 120
 agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
 180
 aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
 240
 ttagctgatt ttatgacaat aaaagagaat ttggatatc tagaaggaat aaacttaact
 300
 tacgttggag atggacgtaa taatattgag cattcattaa tggtagcagg tgctatgta
 360
 ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
 420
 attgcaaaag aaaaagcgag tcaatatggt ggttcagtca tgattacgga taatattgca
 480
 gaagcagttg aaaatacaga tgctatatat acagatgttt gggatcgcac gg
 532

<210> 1612

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1612

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1 5 10 15
 Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```

      20      25      30
Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
      35      40      45
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
      50      55      60
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
      65      70      75      80
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
      85      90      95
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
      100      105      110
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
      115      120      125
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
      130      135      140
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
      145      150      155      160
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
      165      170      175
Thr

```

<210> 1613

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1613

```

nnacgcgttc agccgagaaa tatgctgctt tttgctgcc acctcacaaa tgctacggca
60
cagggcgctc aggttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg
120
gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
180
tatatacaag gaattcacta tatattgggt gaaaggagat ctccccgttc ctgtttcttc
240
tctgccgcat cctgtgaagc gtccaggag gtcgacatgg ataattgtgcg tatgcctggc
300
acggtaaagt gtcgcggtt ttagatgcg tgtgaacgtt ttcgtgactt gaagaggctc
360
aagctgatgt gttcgcgtga gctcgatgca gcgcgtgcg ttgctgctt tgtggctgat
420
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgttc gacaatgcca
480
gtgggcgagg cgatgagttc ctcatttcg tctttctcga ggtcttggtc catgtccata
540
aacataccaa agctggatgg gtcatacgac ggccgagcat gcat
584

```

<210> 1614

<211> 153

<212> PRT

<213> Homo sapiens

<400> 1614

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1 5 10 15
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20 25 30
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35 40 45
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50 55 60
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65 70 75 80
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85 90 95
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100 105 110
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115 120 125
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130 135 140
 Pro Ile Glu Cys Gly Val Val Phe Ser
 145 150

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
 tcggtgcttg tcagtgtcgg tgtcatcatt tccctgcttg gggctctact ggctgggatc
 120
 ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
 180
 ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
 240
 cagatatgcc ttgtcatgac ggtgttgttg gacggtgctt acttggcgat ggcgacctg
 300
 gctgccgccc tcctcctggt gccgtacctg ctgtcagccg cattcgcctt gaagatggtg
 360
 atc
 363

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1 5 10 15
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20 25 30
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

      35          40          45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
  50          55          60
Lys His Glu Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
  65          70          75          80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85          90          95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100          105          110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115          120

```

<210> 1617

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1617

```

accggtgact acctgtggga gaagaagggc atcggtccca tctcaagat tgataagggc
  60
ctggctgacg agggctgcc a gttcgtctc atgaagccga ttcccgccct cgacgagttg
  120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
  180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
  240
gtgcgcgctg cgggtcttgt gccgatactc gaaccgagg tgcacatcca cgctccacat
  300
aaggagaagg ctgaggaaag gctgcacaac ctcatccgcy agcacatcga ctctctgccg
  360
ctcgacgcca agatcatgtt gaagctgacg atcccgagtt ccgaagacct gtatgccgac
  420
ctcattgcgg atccgaaggt cctacgc
  447

```

<210> 1618

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1618

```

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
  1          5          10          15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
      20          25          30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
      35          40          45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
      50          55          60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
      65          70          75          80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
      85          90          95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

100 105 110
 Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
 115 120 125
 Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
 130 135 140
 Pro Lys Val Leu Arg
 145

<210> 1619
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1619
 nnggtaccga aaccctgtgc gctaccgcat aaaatcaaag gaactagtat gcataacgta
 60
 acaacaaatg gtgcttccat tcccgccttt ggcttggca ctttcggtat gcccggcgaa
 120
 gatgtgcttc gcatcgctcc ttacgcgctc aaggctggtt ttcgccatgt cgataccgag
 180
 cagatttatg gcaatgaagt cgaggctcgg gaagcaattg cgacttcgg cgttcagcgt
 240
 ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
 300
 gcattctgtc atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
 355

<210> 1620
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1620
 Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
 1 5 10 15
 Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
 20 25 30
 Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
 35 40 45
 Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
 50 55 60
 Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
 65 70 75 80
 Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
 85 90 95
 Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
 100 105 110
 Asp Tyr Val Asp Leu Leu
 115

<210> 1621
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1621

gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaagtg aagcgggtccg
 60
 gctgggggtcg gcgggacccg cgggccatgt acggcgacat attcaacgcc acggggcggg
 120
 ccccgaggc ggcggtaggc agcgcgctgg cccagggagc cacggtcaag gcagaaggcg
 180
 ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcggcc acaaagcccc
 240
 acctgcccac ctacctgctg ctcttcttcc tgetgctgct ctggggggcg ctggcgggcc
 300
 tcttcacggt ttgccagctg cgcattcgg ccttcgcccg gctgccccac gaccgcttcg
 360
 ctgcgcacgc ccgcgcgccc ggaagg
 386

<210> 1622

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1622

Met Glu Ala Pro Arg Val Ala Pro Gly Cys Ser Arg Pro Ser Glu Ala
 1 5 10 15
 Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile
 20 25 30
 Gln Arg His Gly Ala Gly Pro Arg Gly Gly Gly Arg Gln Arg Ala Gly
 35 40 45
 Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly
 50 55 60
 His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala
 65 70 75 80
 His Leu Pro Ala Ala Leu Leu Pro Ala Ala Ala Leu Gly Gly Ala Arg
 85 90 95
 Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala
 100 105 110
 Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys
 115 120 125

<210> 1623

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1623

nctgggtgcc agagcctcgt cgggggtccag cccagggcc tttgcgagtc agacacttgg
 60
 ggcccttget tgtggttttt ctgggagctt tgggcccagg gttccccgga ccttccctg
 120
 aacttttccg cagtttcaga ggagagtctg caagtgagag ctgcagtgcac tgtgccttgt
 180
 gcttggcacc caagcagggc atgggagtct taagtgaac cagggcctca aggacaacag
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<210> 1624
 <211> 103
 <212> PRT
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<400> 1624
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 20 25 30
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 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
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 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
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<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
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 480
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<210> 1626
 <211> 106
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<400> 1626
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 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
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<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
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Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly			
	35	40	45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly			
	50	55	60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu			
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Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr			
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<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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		20						25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
			85						90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
		100						105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115					120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145				150					155					160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
			165						170					175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
		180					185						190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200					205			
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
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Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225				230					235					240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245						250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
		260					265						270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

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Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly
305              310              315              320
Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu
      325              330              335
Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln
      340              345              350
Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn
      355              360              365
Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp
      370              375              380
Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu
385              390              395              400
Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser
      405              410              415
Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu
      420              425              430
Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr
      435              440              445
Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys
      450              455              460
Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile
465              470              475              480
Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser
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<210> 1631

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1631

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<210> 1632

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1632

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Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val

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	20		25		30										
Glu	Leu	Leu	Gly	Phe	Ser	Lys	Asp	Asp	Ile	Thr	Asn	Gln	Val	Gln	Gln
	35		40		45										
Ala	Val	Gly	Ala	Leu	Gly	Leu	Pro	Pro	Leu	Glu	Asp	Glu	Asn	Ala	Gln
	50		55		60										
Gly	Glu	Asp	Pro	Ala	Ser	Gln	Val	Pro	Pro	Val	Thr	Asp	Glu	Asp	Pro
65			70		75									80	
Thr	Ala	Phe	Phe	Asp	Gln	Val	Pro	Asp	Val	Pro	Leu				
			85		90										

<210> 1633

<211> 259

<212> DNA

<213> Homo sapiens

<400> 1633

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120
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<210> 1634

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1634

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		20			25		30								
Ala	Val	Arg	Leu	Cys	Ile	Gly	Thr	Gly	Leu	Leu	Gly	Gly	Phe	Thr	Thr
	35		40		45										
Tyr	Ser	Ala	Leu	Thr	Val	Glu	Thr	Gly	Gln	Arg	Val	Met	Ser	Gly	Gln
	50		55		60										
Trp	Leu	Trp	Gly	Ile	Ala	Tyr	Leu	Leu	Thr	Ser	Val	Val	Ala	Gly	Ala
65			70		75									80	
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<210> 1635

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1635

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<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

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Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20					25					30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
		35					40					45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
	50					55					60				
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65					70					75				80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85					90						95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
			100					105					110		
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
		115				120						125			
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
	130					135					140				
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145				150					155					160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

				165						170						175
Lys	Gly	Leu	Met	Thr	Leu	Gln	Ala	Leu	Tyr	Gly	Thr	Ile	Pro	Gln	Ile	
				180						185					190	
Phe	Gly	Lys	Gly	Glu	Cys	Ala	Arg	Val	Arg	Thr	Gly	Cys	Phe	Val	Val	
		195					200					205				
Val	Lys	Glu	Gly	Pro	Ser	His	Pro	Lys	Arg	Glu	Glu	Glu	Arg	Glu	Ala	
	210					215					220					
Pro	Tyr	Lys	Gln	Ile	Gln	Leu	Ile	Leu	Ile	Ile	Tyr	Glu	Tyr	Cys	Thr	
225				230						235				240		
His	Glu	Phe														

<210> 1637

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1637

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120
cgcggtgaca gctgcggcat cctcggcgcc tccggttccg gcaagagcac cctgctcaat
180
atccttgccc tgctggacct gcccaacagc ggccagtacc actttgccgg ccaagatatt
240
ttggcgctca ccccgacga actgtcggcg atccgcaact cagntnnaat ggttgtgttc
300
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357

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<210> 1638

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1638

Xaa	Met	Met	Thr	Gln	Thr	Pro	Ala	His	Pro	Gly	Leu	Ile	Ser	Leu	Gln	
1				5					10					15		
Gly	Ile	Gly	Lys	Arg	Tyr	Gln	Leu	Ala	Gly	Gln	Lys	Leu	Ser	Ile	Leu	
			20				25					30				
Asn	Asp	Val	Cys	Leu	Ser	Ile	Ser	Arg	Gly	Asp	Ser	Cys	Gly	Ile	Leu	
		35				40					45					
Gly	Ala	Ser	Gly	Ser	Gly	Lys	Ser	Thr	Leu	Leu	Asn	Ile	Leu	Gly	Leu	
	50				55						60					
Leu	Asp	Leu	Pro	Asn	Ser	Gly	Gln	Tyr	His	Phe	Ala	Gly	His	Asp	Ile	
65				70					75				80			
Leu	Ala	Leu	Thr	Pro	Asp	Glu	Leu	Ser	Ala	Ile	Arg	Asn	Ser	Xaa	Xaa	
			85					90					95			
Met	Val	Val	Phe	Gln	Ser	Phe	Asn	Leu	Leu	Pro	Arg	Leu	Ser	Ala	Leu	
			100				105						110			
Asp	Asn	Val	Ala	Leu	Pro	Leu										
				115												

<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
 acgcgtgtac gtgcgcgtgt gatttcacat gccctcaaag atattcttac tgaaggcgat
 60
 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga
 120
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat
 180
 attgatccga cattacgtcg tggtatggat gagattgata agaaaccgga actaaaagaa
 240
 cgctttgtaa catcgatga ggcttgggat atgatgactt ctaagacgac tgcgttggt
 300
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc
 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
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 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctctccacc
 180
 ttcatcgctt ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacct taactacctc agaatgggac
 360
 gttatttgga aaaaag
 376

<210> 1642

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1642

Met	Asp	Gly	Leu	Leu	Glu	Trp	Glu	Arg	Leu	Gly	Arg	Ser	Cys	Val	Gly
1				5					10					15	
Trp	Val	Thr	Pro	Asn	Leu	Lys	Asn	Pro	Leu	Arg	His	Met	Trp	Leu	Pro
			20					25					30		
Ser	Ser	Thr	Phe	Ile	Ala	Ser	Phe	Arg	Leu	Asp	Ala	Gly	Lys	Gly	Gly
			35				40					45			
Leu	Gly	Gly	Gln	Arg	Glu	Leu	Leu	Phe	Ile	Gln	Glu	Leu	Cys	Tyr	Thr
			50			55				60					
Ser	His	Phe	Thr	Cys	Ala	Thr	Cys	Ser	Gly	Leu	Asn	Cys	Ala	Ser	Pro
65					70					75				80	
His	Ser	Tyr	Val	Glu	Val	Leu	Thr	Leu	Thr	Thr	Ser	Glu	Trp	Asp	Val
			85					90						95	
Ile	Trp	Lys	Lys												
			100												

<210> 1643

<211> 494

<212> DNA

<213> Homo sapiens

<400> 1643

aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc
 60
 gagtgtctga gagcaggtgc aggagaaggt gtgggtcca cctgggcctc tgaagccagg
 120
 ggccagaatc cccagatcta ggtccaagag ggggtccat gacctccca tgctgctctt
 180
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggtcc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagcccatg ctcacagccc tataagtga cgatggcacc ctatatcatc taagcggggc
 360
 tgtgctcct gaggttttag ggacaccaga atgagcccc ctcggcgag tctggctctg
 420

gggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca
 480
 ccatcccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
 nnagatctgt cggataatgg ctttggctcc gacatggtga cactggtgct tgccatcggg
 60
 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcgtagatgcc cagctaatagc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcggttg aagcaggggtg ccagcactct gatccgggct
 240
 ttgggcacca atcctaaact gacagcgtg gatatcagtg gcaatgccat aggggatgct
 300
 ggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

1317

<210> 1649

<211> 441

<212> DNA

<213> Homo sapiens

<400> 1649

gcgtcggcag ctgaacgggt gctactggca atcggcgaac ccgaactgct ggatacgtcc
 60
 accaactcac ggttgtecg cactttctcc aacaaggatga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcac gatcagatcg ttctgtattt ccgccacgcc
 180
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
 240
 aaatcgcccc tgccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggtctgc cggctcttga gtcgccccctg ggggtgttca acgccactga agacggcgcg
 360
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccctgg
 420
 gcgaccaagc gcctggccga a
 441

<210> 1650

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1650

Ala	Ser	Ala	Glu	Arg	Val	Leu	Leu	Ala	Ile	Gly	Glu	Pro	Glu	Leu	
1			5					10					15		
Leu	Asp	Thr	Ser	Thr	Asn	Ser	Arg	Leu	Ser	Arg	Ile	Phe	Ser	Asn	Lys
			20					25					30		
Val	Ile	Arg	Arg	Tyr	Pro	Ala	Phe	Glu	Asp	Phe	His	Gly	Met	Glu	Glu
			35				40					45			
Cys	Ile	Asp	Gln	Ile	Val	Ser	Tyr	Phe	Arg	His	Ala	Ala	Gln	Gly	Leu
			50			55				60					
Glu	Glu	Lys	Lys	Gln	Ile	Leu	Tyr	Leu	Leu	Gly	Pro	Val	Gly	Gly	Gly
					70					75				80	
Lys	Ser	Ser	Leu	Ala	Glu	Lys	Leu	Lys	Gln	Leu	Ile	Glu	Lys	Val	Pro
				85					90					95	
Phe	Tyr	Ala	Ile	Lys	Gly	Ser	Pro	Val	Phe	Glu	Ser	Pro	Leu	Gly	Leu
				100				105					110		
Phe	Asn	Ala	Thr	Glu	Asp	Gly	Ala	Ile	Leu	Glu	Glu	Asp	Phe	Gly	Ile
			115				120					125			
Pro	Arg	Arg	Tyr	Leu	Asn	Thr	Ile	Met	Ser	Pro	Trp	Ala	Thr	Lys	Arg
			130			135					140				
Leu	Ala	Glu													
145															

<210> 1651

<211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

```

nccgcggatc cctccggcat cctggttata gtcacctga aggaatccgg agccccgactg
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cgccgcgagc tttccgaacg cctcgaggat tacgcgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgetca cgggccaagc agaagacgga
240
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

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<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

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Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
1      5      10      15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
20     25     30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
35     40     45
Leu Arg Thr Ala Ala Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
50     55     60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65     70     75     80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
85     90     95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
100    105    110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
115    120    125
Met Trp Ser Ala Ala Gly Glu Phe
130    135

```

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

```

ccagcctctc tccgaccgcg tcctttctcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttag gtgacaagat ccggtgcatt
120

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcggtgcgtc
 180
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccggtgct gcacaggtgg cacaagcag cacaccgctg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro	Ala	Ser	Leu	Arg	Pro	Arg	Pro	Ser	Ser	Gly	His	Thr	Ala	Pro	Asn
1				5					10					15	
Val	Ala	Ser	Pro	Ser	Pro	Ala	His	Met	Ala	Ile	Ala	Pro	Pro	Asp	Glu
			20					25					30		
Leu	Ser	Asp	Lys	Ile	Arg	Cys	Ile	Leu	Arg	Thr	Leu	Glu	Pro	Gly	Asp
		35				40					45				
Ser	Val	Lys	Glu	Ile	Leu	Asn	Thr	Ser	Arg	Val	Val	Gly	Ile	Asp	Val
	50				55					60					
Gln	Ser	Ser	Leu	Leu	Ile	Ala	Gly	Ala	Gln	His	Leu	Tyr	Leu	Leu	Asp
65				70					75					80	
Asp	Tyr	Phe	Gln	Arg	Pro	Asn	Gly	Glu	Ile	Val	Asn	Val	Trp	Glu	Ala
			85					90					95		
Pro	Pro	His	Glu	Arg	Asp	Ala	Leu	Ile	Val	Ala	Ala	Gly	Val	Ala	Gln
		100					105					110			
Val	Ala	Gln	Ser	Ser	Thr	Pro	Val	Gln	Ile	Trp	Arg	Trp	Glu	Gln	Leu
		115				120						125			
Arg	Leu	Cys	Leu												
			130												

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

nccctgacct gacctgtcct cgccatggcc gaggcgcct ccggcgccgg gggcacgtcc
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 ctggagggcg agcgtggcaa gagggccccg ccggagggcg agcctgcagc cccggcgctc
 120
 ggagttctgg ataagctttt cggaagcgcg ctctgcagg ctggtcgcta cctggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gacctccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgctg gggcattccc
 300
 gagctcatcg tgcaagtcg ccaccaccgc cacacgcgtg cctacgcctt ctttgcacc
 360

gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcggggggcac ccgcggttc tctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgccaa gcaggagaa gcaactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcaggtgtt cctgtccac
 660
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgctggctg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggtg atcagacaag ccgggatgtt tctgctggg tctttgccct cttcaacgtg
 900
 atctggcgta cgctgttct ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cagccccca gttcaggtgc
 1020
 gtgcgacgta tcatcccat cactcgggcc gaggagtct actaccgcc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
	50					55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70				75					80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
				85				90					95		
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120					125			
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135					140				
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145				150				155					160		
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

```

          165          170          175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
          180          185          190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
          195          200          205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
          210          215          220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
225          230          235          240
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
          245          250          255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
          260          265          270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
          275          280          285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
          290          295

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<210> 1657
 <211> 333
 <212> DNA
 <213> Homo sapiens

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<400> 1657
tgtagaggct cgaggtcatc cggaccatgt ggtccaggac gcccccgctc tccgggcccc
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gcacggagac gcggcgtcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccg cgggcttccc gcgccgttc agggggcggg cggcagctcg ggccggtact
180
tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtaccctc
300
gcgtggacat ccgcccctgc tagcatcagg gct
333

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<210> 1658
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 1658
Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
1          5          10          15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
          20          25          30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
          35          40          45
Glu Val Pro Ala Arg Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
          50          55          60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65          70          75          80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

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85 90 95
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
 100 105

<210> 1659

<211> 382

<212> DNA

<213> Homo sapiens

<400> 1659

nnaagcttat ttgttattac taatattttc cgtgaccaga tgggcccgtc tgggtgagatt
 60
 tacacaactt acaagatgat ttgggatgct attcgtaagg tgcctactgc cactgttctc
 120
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
 180
 ggttttgact tggagaaagg cccagcccaa ctgggtcact ataataccga aggaattctc
 240
 tgtcccgcact gccaaaggcat cctcaaatat gagcataata cctatgcaa cttggggcgcc
 300
 tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg
 360
 gttgagttaa ccaacaatcg cn
 382

<210> 1660

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1660

Xaa	Ser	Leu	Phe	Val	Ile	Thr	Asn	Ile	Phe	Arg	Asp	Gln	Met	Gly	Arg
1				5					10					15	
Tyr	Gly	Glu	Ile	Tyr	Thr	Thr	Tyr	Lys	Met	Ile	Leu	Asp	Ala	Ile	Arg
			20					25					30		
Lys	Val	Pro	Thr	Ala	Thr	Val	Leu	Leu	Asn	Gly	Asp	Ser	Pro	Leu	Phe
			35				40					45			
Tyr	Lys	Pro	Ala	Ile	Pro	Asn	Pro	Val	Gln	Tyr	Phe	Gly	Phe	Asp	Leu
			50			55				60					
Glu	Lys	Gly	Pro	Ala	Gln	Leu	Ala	His	Tyr	Asn	Thr	Glu	Gly	Ile	Leu
65					70				75					80	
Cys	Pro	Asp	Cys	Gln	Gly	Ile	Leu	Lys	Tyr	Glu	His	Asn	Thr	Tyr	Ala
				85				90					95		
Asn	Leu	Gly	Ala	Tyr	Ile	Cys	Glu	Asp	Cys	Gly	Cys	Lys	Arg	Pro	Asp
			100				105					110			
Leu	Asp	Tyr	Arg	Leu	Thr	Glu	Leu	Val	Glu	Leu	Thr	Asn	Asn	Arg	
			115				120					125			

<210> 1661

<211> 524

<212> DNA

<213> Homo sapiens

<400> 1661

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 60
 gctgcgggta gtagagctcc aggcctctga ggaaggccac gtagcccttg tggccggctc
 120
 gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttggggtcgc
 180
 tgagcacctg ctctcatca tcagggttca ggaccttga ctgccgcagg taagggtgga
 240
 tgcgtgaggg gtccgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagg
 300
 actcgtcctc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc
 360
 agtgctgaga gcgatgcgg ctctgcccc caccggggc cagctccac tccttctcag
 420
 acgctggggc agggctctcg tcagggcctc gagggggatc agcccaggcg catccaggag
 480
 aggtgcccag ctccgtgtcc catccacgc ttgatcgtg catg
 524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
		20					25					30			
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
		35				40					45				
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
	50				55						60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65				70					75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
		85						90					95		
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
		100					105						110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
	115					120						125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
	130				135						140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145				150					155					160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
			165						170						

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcttagtttg ggtatctatt tctctcagcg ttctcagatc
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 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggttaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1664
 Xaa Val Leu Val Met Ile Thr Pro Ser Leu Gly Ile Tyr Phe Ser Gln
 1 5 10 15
 Arg Ser Gln Ile Ser Arg Thr Gln Asp Asp Glu Ala Arg Thr Arg Ala
 20 25 30
 Ser Ile Ser Thr Leu Gln Asp Glu Val Lys Arg Trp His Asp Pro Asp
 35 40 45
 Tyr Val Arg Ala Gln Ala Arg Ser Gln Leu Gly Trp Val Met Pro Gly
 50 55 60
 Glu Thr Gly Tyr Gln Val Ile Gly Glu Asn Gly Lys Val Ile Gly Ser
 65 70 75 80
 Thr Thr Ser Leu Asp Glu Lys Asp Pro Ala Ser Glu Ala Ser Ala Asp
 85 90 95
 Ala Arg Trp Trp Gln Glu Ala Cys Gly Ser Val
 100 105

<210> 1665
 <211> 431
 <212> DNA
 <213> Homo sapiens

<400> 1665
 gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcgccacta tctccggttg tgaagtactc atgcaacgcg cttttgctg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctgtt gatttggtgt tgctcgacgt caaatcgggg
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcggtgc aacctaccat cgattttggt
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggt tcgttggtgg ccccgatac
 360
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
tccgctgaga ccagcggttg tgacttccca ggtgagactg tccgcacat ggccaagatc
60
gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcg caggccaag
180
ttcatcgctg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagacct cgctgggtc
300
tggggcgctc acgcccgtcgt taccgccgtg tttagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
      20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
      35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
      50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
      85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
      100           105           110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
      115           120

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<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

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ggatcctgca gtggtgatct gtcacgtca cgacacagaa ctgaacatgg aatgaacaa
60
cgaaaactcc accccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tcccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgccttct cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattgcag cttgtgtctg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtcccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaataaatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggtgtgtg gagcgagtgt gtctagtgga ctgcaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggttctt gcacctgtta tacttttggg tacgagttag ctccacttag cttegttaag
900

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attagaaatt tccatgaaac acttacccac atataaatc tgtgtaaagc tttatttttt
 960
 tccccaccta cttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taaggtttaa catacgagag agcgaggaaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcattctcca ttgtgacaac cttctcccc
 1140
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtgggtt gggtgactac atttgactac caccactgaa ggcggcggac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcc
 1320
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
 1380
 ttgtaaggc acctcgtct ggcattcgga aaaccacccc atcttgccag agtccttgg
 1440
 tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1				5				10						15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
		20						25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
	35					40						45			
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50					55					60				
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70					75					80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
			85					90					95		
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
		100					105						110		
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
		115					120						125		
Cys	Ser	Val	Leu												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

gcgcgcggg gcgggaggac gccagtcgtc ttcccgcccc tcaccacgac acgaccatta
 60

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcgga acccacggcg
 120
 gcateccgca tgaagccggg gtcgcggggt ggggacacga ttttcgctgg cgcctcgctg
 180
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttctt catgaagacg
 240
 gcagccccga cgttggtggc taacaccgat aactttttca cgtcccgggc ttggacaacg
 300
 gatcagaacc cgccggcctt tggatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgcctatcgc agtgccgctc tcgggtggga tcgctctgtt taccaccag
 420
 ctgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
			20					25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
			35				40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
			50			55					60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65				70					75					80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85					90					95		
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
			100					105					110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
			115				120					125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
			130				135					140			

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct
 60
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctcccagc gtcttttcca tgagccaaag gcctggctct ggaggggggt gcctgcagc
 180
 tctgctggcc ttcttcaggg ggagttcatt gctgggggtg gcctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggt aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactggttt t
 401

<210> 1674

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1674

Met	Ala	Leu	Tyr	Phe	Phe	Ile	His	Lys	Trp	Arg	Ile	Cys	Ile	Leu	Phe
1				5					10					15	
Ser	Gln	Ile	Leu	Pro	Ser	Pro	Cys	Cys	Ile	Leu	Leu	Leu	Pro	Leu	Pro
		20						25					30		
Ser	Thr	Val	Glu	Val	Pro	Ala	Gly	Pro	Pro	Pro	Ala	Met	Asn	Ser	Pro
		35					40					45			
Gly	Arg	Arg	Pro	Ala	Glu	Leu	Gln	Gly	Thr	Pro	Leu	Gln	Asp	Gln	Ala
	50					55					60				
Phe	Gly	Ser	Trp	Lys	Arg	Arg	Trp	Glu	Pro	Gly	Val	Thr	Glu	Gln	Thr
65				70					75					80	
Gly	Leu	Cys	Arg	Ala	Phe	Ile	Ser	Ser	Phe	Thr	Ala	Arg	Ser	Glu	Tyr
			85					90					95		
Ile	Lys	Thr	Gln	Arg	Pro	Trp	Gln	Thr	Pro	Gln	Arg	Leu	Glu	Cys	Ala
			100					105					110		

Arg

<210> 1675

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1675

gccggcgac ccacctggga cgtggtgaaa tcggcaaac tcacctcttt agctacctgc
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 gcgccaaccg cacgggcagc ctcccacag ccctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattcccac cacagtcctt cgactccac
 240
 ccgcacacgc cctgggaacc gtcaccgcg gtaccaccgg gtcaatcggc tccgcaaatg
 300
 cgaccgctgg atgtgccacc accccgcnc tccgcagtgc gtcctgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
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 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
 1 5 10 15
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20 25 30
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35 40 45
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50 55 60
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65 70 75 80
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85 90 95
 Arg

<210> 1677
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 1677
 nntcatgatt tctcaatga tgccaagggtg atggaggccg gctatacctg ggtgcagggtg
 60
 gatttgccgc gtacgggtgc ttctactggg tgtttngac tggaatgggc cncggggag
 120
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtgggc gaatggtcgg
 180
 gtggggcttt tcggtaaact ctacgatggg gggacggggt cttattgctg caggtaatca
 240
 gccgcggggg ttggctgctg tgggtggcgca ggagccagct atggagccct acacttacct
 300
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
 360
 tgctgcctcc cccggccgtg tcttcacga cactcccgaa tatatgaaga acagtgtcta
 420
 cgagggtggc caccgcatt gcctgtccga caatttgcgt aattcttttag accccatccg
 480
 tagccacaaa taatggggcg gatcggtctt tccctcacca agacgcataa tttccccgt
 540
 gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga
 600
 attggtgaag gaccgtaagg ctccgacgcg t
 631

<210> 1678
 <211> 78
 <212> PRT

<213> Homo sapiens

<400> 1678

Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1 5 10 15
 Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
 20 25 30
 Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
 35 40 45
 Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
 50 55 60
 Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
 65 70 75

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttcccac
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 agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
 120
 cagctgatct gccctatctg cctggagatg tttaccaage cagtggtcac cttgccgtgc
 180
 cagcacaacc tgtgccgga gtgtgccaat gacatcttcc aggtgcaaa tcctactgg
 240
 accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgcc tacctgccgc
 300
 cagcaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctggtggag
 360
 aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
 420
 cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
 480
 cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
 531

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1 5 10 15
 Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
 20 25 30
 Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
 35 40 45
 Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
 50 55 60
 Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

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<210> 1681
 <211> 396
 <212> DNA
 <213> Homo sapiens

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<400> 1681
gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
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ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtccggtt acaagaagga gccttcgggg tgcccgtgt gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttccg cgtggatgtg ctcagg
396

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<210> 1682
 <211> 132
 <212> PRT
 <213> Homo sapiens

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<400> 1682
Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
1          5          10          15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
          20          25          30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
          35          40          45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
50          55          60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65          70          75          80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
          85          90          95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
          100          105          110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
          115          120          125
Asp Val Leu Arg

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130

<210> 1683

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1683

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nncggccgga caggtcccga gcagccccgc ccaacatgga cccagacccc caggcgggcg
60
tgcaggtggg catgcgggtg gtgcgcggtg tggaccggaa gtggggccag caggacggcg
120
gcgaggggag cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgtg ctgtacgaca acgcccagat cggcggtccg caccccaaca
300
tcattctgtg ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgcgccacg
420
ccttcgaccg ctacgagacc gtcactcgc gccctgtcac actgagtccc cgccagggcc
480
tcccgaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctacacaggat ggtgagtggg gcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaagg
660
aaaccggggc gccgga
676

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<210> 1684

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1684

```

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1      5      10      15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20     25     30
Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
35     40     45
Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
50     55     60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65     70     75     80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
85     90     95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100    105    110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```

115 120 125
 Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala
 130 135 140
 Thr Arg Pro Leu Thr Arg Ala Leu Ser His
 145 150

 <210> 1685
 <211> 2740
 <212> DNA
 <213> Homo sapiens

 <400> 1685
 ngaggaggag ccggcgggcg ctccggggaa agggaggggg gcgctccgca gccgccgccg
 60
 cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
 120
 ggggcctccc ctctccatc ctctctctt gcggggcaaaa cccaggaac cggcagcaga
 180
 aactccgaa gcggcggtgc gggggggcgc agcgggtggtg gagggagcta ctgaaagaa
 240
 ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg
 300
 gcggccgcgg ctcagatgca cgctaagaac ggcgggcgca gcagtagccg cagctccccg
 360
 gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
 420
 gcggcgggcg agggccccca gcagagcgca gagggcagcg cgagcggcg gggcatgcag
 480
 geggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
 540
 caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
 600
 ctgagaaccg agatggacga gatgaggac actttcttcg aggaggatgc ctgtcaactg
 660
 caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
 720
 ctccgcaaag ccgagcgcaa aaggctccgc tacgccaga ccggggaaat cgacggggag
 780
 ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
 840
 catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
 900
 aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
 960
 atgaaagagt tacccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaag
 1020
 gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttggt
 1080
 aaggaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
 1140
 ttgaaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
 1200
 aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg
 1260

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
1320
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca
1380
accgcctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg
1440
gtggaagacg agacggagct gctgcggagg aacgtggccg acctggagga gcagaacaag
1500
cgcatacagg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc
1560
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgccctg
1620
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg
1680
tccaacatgc agcgtacga cctggcctcg cacctgggca tccgcggcag cccccgcgac
1740
agcgacgccg agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac
1800
cgcaagcgcg aagggcccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc
1860
gctgcctcan cgccactcg ctcttctac ccggcgcccg ggccctggcc caagagcttc
1920
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgccctggg caagaccatc
1980
gaccggctca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa
2040
cggggacctg ttnnccgact catggacgag gaggacgacg gcagccgcat ccgggagcac
2100
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc
2160
atcgaccgcc tcgaggtgcc caagtctgcg gacgaccgcg gcgccgagga gccatttcc
2220
gtgagtcaga tgttccagcc tatcatTTTA cttatttctc ttcttgatt attttcatca
2280
ctttcttaca caacaatatt taaacttgtc ttcttttta cactgttttt tgtactgtaa
2340
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcaccttc
2400
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aactgaag
2460
actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaattc aataagaagc
2520
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa
2580
tttttacttc ttttttcat cctgtttgtc tcctcttgat aaataattgg catactgaat
2640
ataaaaatgg actacatgtc tcataattat ttctcagtag ttcactatta ttattcaaaa
2700
gctggacgga cattcacaat ttggtcacat ttccaaaaag
2740

<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1 5 10 15
 Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
 20 25 30
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

          405          410          415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
          420          425          430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
          435          440          445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
          450          455          460

```

<210> 1687
 <211> 326
 <212> DNA
 <213> Homo sapiens

```

<400> 1687
gtgcacacag gtgagcgctcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tctctgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggacctgagc
300
aaacggcgat gtggtgaagc cgaact
326

```

<210> 1688
 <211> 89
 <212> PRT
 <213> Homo sapiens

```

<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1          5          10          15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
          20          25          30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
          35          40          45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
          50          55          60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65          70          75          80
Phe Glu Gln His Arg Thr Arg Val Pro
          85

```

<210> 1689
 <211> 301
 <212> DNA
 <213> Homo sapiens

```

<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60

```

tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
 120
 ttggcctttt cccagtcocat taagcctaaa caaaccacat cactttacat caggcagatc
 180
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaataaac taaattattg
 240
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc
 300
 a
 301

<210> 1690
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1690
 Met His Cys Gln Leu Gly Asp Val Leu Ile Trp Ser Gly Ile Leu His
 1 5 10 15
 Leu Val Ile Ala Asp Asn Thr His Val Ala Pro Arg Lys Lys Lys Leu
 20 25 30
 Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile
 35 40 45
 Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu
 50 55 60
 Ile Lys Ser Thr Lys Leu Leu Pro Leu Trp Leu Ser Val Lys Glu His
 65 70 75 80
 Asn Glu Glu Asn Leu Glu Pro Tyr Leu Ile Leu
 85 90

<210> 1691
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 1691
 nacgcgttcc ggtatgccga tgggcgggtg ctgctgggcg tccgcggcg ggcgggtgag
 60
 ttgtgccttg aagtgtggga ccgcgggccc ggcattcctc aagacaaaca aaagtcattc
 120
 ttcgaagaat tcaaacgcct ggacagtcac cagaccgcg cagagaaagg cctgggcctg
 180
 ggctggcgga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg
 240
 tggcggggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcage
 300
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
 420
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtga ggggtgtcgg
 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg
 1 5 10 15
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
 145 150 155 160
 Pro

<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
 acgcgtgttc catctgcagc cgtgcgaaaa ctctcccacc atgtcgcaga ctggatactt
 60
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat
 120
 actggggggg atgaggcctt cgacactgcc aactcctoca tcgtgtctgg cgagagtatc
 180
 cgtttttttt tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
 240
 tccggtggct gtgtgctcct gcacacctcc cgaaaggcca gcatcgctct gaacgagacg
 300
 gccacctccc tggataacgt gctgcggacc atg
 333

<210> 1694
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1           5           10           15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
          35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
          50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
          65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
          100           105           110

```

<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

```

tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
60
gccaggaatt tgaagactat cttcaccagg aaatgcaaaa tagcaaggaa aatttcacca
120
cagcacacaa cacatcgga cggttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaagc gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatttct tttctgaaat ggagaaattt aatgatctgg
300
tcagttcagc ccacatgctg caggtcaacc gggcatataa tgagaatgat gtgaccta
360
tgcggtccaa aatgaacatt atccaaaaac tcttctgaa ttctgacatc cctccaaagc
420
tgaggggtgaa tgtccctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1           5           10           15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20           25           30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
          35           40           45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```

```

      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100             105             110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115             120             125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130             135             140
Glu Gly Tyr Leu
145

```

<210> 1697

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1697

```

accaggttcc caccatcctc aggggaatca caggttactg gctttggaga ccgagatgtc
60
ttcccgcctc ccaggggcct gtggatggga ctccctgcga attcgactcc caggggaaaa
120
gccaaagagct gcctccttgg gacaactggg gcggcagctg tgatcgacaca tggcttcagc
180
agaggcctga gcggctgcct ccgttggcca gcaggetctg agagcactcg cccggcctga
240
ctgttcatcc atcctttcac ccggaggcca gctgtggctg tctgtgctct cagaggggag
300
gcgatgggca aggcgcctgc catgcagatg ggtgggtg
337

```

<210> 1698

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1698

```

Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
1      5      10      15
Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
      20      25      30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65      70      75      80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85      90      95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100     105

```

<210> 1699
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 1699
 nacgcgttcc ttaaggatca tcctgagggt ctgtacgtag accttctaata tgcggatatg
 60
 aatggtgtgg tgcgcggcaa ggcacatcgaa cgcaccagcc tccacaaggt ttacgagaag
 120
 ggcatataacc tgcctgcctc tctatttgcc ctggatatca atggtctaac ggtggaaagc
 180
 accggcctgg gtctggacat cggatgatgt gaccgaatct gttatccaat ccccgacacc
 240
 ctgtgcaatg aacctgggca aaagcgccca accgcgcaac tgctgatgac catgcacgaa
 300
 cttgaagggg aacctttttt cgccgatcct cgcgaagtac tccgccaagt tgtaagcaaa
 360
 tttgacgacc tcggtctgac catctgcgcc gcattcgagc tggagttcta cctgattgac
 420
 caggagaacg tgaatggccg gc
 442

<210> 1700
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1700
 Xaa Ala Phe Leu Lys Asp His Pro Glu Val Leu Tyr Val Asp Leu Leu
 1 5 10 15
 Ile Ala Asp Met Asn Gly Val Val Arg Gly Lys Arg Ile Glu Arg Thr
 20 25 30
 Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu
 35 40 45
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly
 50 55 60
 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr
 65 70 75 80
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met
 85 90 95
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu
 100 105 110
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile
 115 120 125
 Cys Ala Ala Phe Glu Leu Glu Phe Tyr Leu Ile Asp Gln Glu Asn Val
 130 135 140
 Asn Gly Arg
 145

<210> 1701
 <211> 8265
 <212> DNA
 <213> Homo sapiens

<400> 1701
nacgcgtgaa gggagggcga ggccggagcc cgagggcgac ccgagaagcg gcggggcggc
60
gggcccggcg gcggggcgca gagccaggca gcgcagggtat agccaggctg gagaaaagaa
120
gctgccacca tggttgcact ttcactgaag atcagcattg ggaatgtggt gaagacgatg
180
cagtttgagc cgtctacat ggtgtacgac gcctgccgca tcattcgtga gcggatccca
240
gaggccccag ctggctctcc cagcgacttt gggctctttc tgcagatga tgaccccaaa
300
aagggtatat ggctggaggc tgggaaagct ttggactact acatgctccg aaatggggac
360
actatggagt acaggaagaa acagagaccc ctgaagatcc gtatgctgga tggaaactgtg
420
aagacgatca tggtagatga ctctaagact gtcactgaca tgctcatgac catctgtgcc
480
cgcattggca tcaccaatca tgatgaatat tcattggttc gagagctgat ggaagaaaag
540
aaagaggaag gaacgggcac actcaaaaag gacaagacat tgctgcgaga tgaaaagaag
600
atggagaaac taaagcagaa attgcacaca gatgatgagt tgaactggct ggaccatggt
660
cggacactga gggagcaggg tgtagaggag cagcagacgc tgctgctgcg gaggaagtcc
720
ttttactcag accagaatgt ggattccccg gaccctgtac agctgaacct cctgtatgtg
780
caggcacgag atgacatcct gaatggctcc caccctgtct cctttgacaa ggcctgtgag
840
tttgctggct tccaatgcca gatccagttt gggccccaca atgagcagaa gcacaaggct
900
ggcttccttg acctgaagga ctctctgccc aaggagtatg tgaagcagaa gggagagcgt
960
aagatcttcc aggcacacaa gaattgtggg cagatgagtg agattgaggc caaggctccg
1020
tacgtgaagc tagcccgctc tctcaagact tacgggtgtct ccttcttctt ggtgaaggaa
1080
aaaatgaaag ggaagaacaa gctagtgtcc aggccttctg gcacaccaa ggagtgtgtg
1140
atgcgagtgg atgagaagac caaggaagtg atccaggagt ggaacctcac caacatcaaa
1200
cgctgggctg cgtctcccaa aagcttcacc ctggattttg gagattacca agatggctat
1260
tactcagtac agacaactga aggggagcag attgcacagc tcattgccg ctacatcgat
1320
atcatcctga agaagaaaaa aagcaaggat cactttgggc tggaaggaga tgaggagtct
1380
actatgctgg aggactcagt gtccccaaa aagtcaacag tctgcagca gcaatacaac
1440
cgggtgggga aagtggagca tggctctgtg gccctgctg ccatcatgcg ctctggagcc
1500
tctggtcctg agaatttcca ggtgggcagc atgccccctg cccagcagca gattaccagc
1560

ggccagatgc accgaggaca catgcctcct ctgacttcag cccagcaggc actcactgga
1620
accattaact ccagcatgca ggccgtgcag gctgcccagg ccaccctgga tgactttgac
1680
actctgccgc ctcttggcca ggatgctgcc tctaaggcct ggcgtaaaaa caagatggat
1740
gaatcaaagc atgagatcca ctctcaggta gatgccatca cagctggtac tgcgtctgtg
1800
gtgaacctga cagcagggga ccctgctgag acagactata ccgcagtggg ctgtgcagtc
1860
accacaatct cctccaacct gacggagatg tcccgtaggg tgaagctgct ggctgccttg
1920
ctggaggacg aaggcggcag tggtcggccc ctgttgccag cagcaaaggg ccttgccggga
1980
gcagtgtcag aactgctgcg cagtgcctaa ccagccagtg ctgagccccg tcagaacctg
2040
ctgcaagcag ctgggaacgt gggccaggcc agtggggagc tgttgcaaca aattggggaa
2100
agtgaactg acccccactt ccaggatgcg ctaatgcagc tcgccaagc tgtggcaagt
2160
gctgcagctg ccctggctct caaggccaag agtgtggccc agcggacaga ggactcggga
2220
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<212> PRT

<213> Homo sapiens

<400> 1702

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Leu	Phe	Leu	Ser	Asp	Asp	Asp	Pro	Lys	Lys	Gly	Ile	Trp	Leu	Glu	Ala
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Gly	Lys	Ala	Leu	Asp	Tyr	Tyr	Met	Leu	Arg	Asn	Gly	Asp	Thr	Met	Glu
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His	Arg	Gly	His	Met	Pro	Pro	Leu	Thr	Ser	Ala	Gln	Gln	Ala	Leu
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Leu	Asp	Asp	Phe	Asp	Thr	Leu	Pro	Pro	Leu	Gly	Gln	Asp	Ala	Ala
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His Lys Val Ser Gln Met Ala Gln Tyr Phe Glu Pro Leu Thr Leu Ala		
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Ala Val Gly Ala Ala Ser Lys Thr Leu Ser His Pro Gln Gln Met Ala		
1745	1750	1755
Leu Leu Asp Gln Thr Lys Thr Leu Ala Glu Ser Ala Leu Gln Leu Leu		
1765	1770	1775
Tyr Thr Ala Lys Glu Ala Gly Gly Asn Pro Lys Gln Ala Ala His Thr		
1780	1785	1790
Gln Glu Ala Leu Glu Glu Ala Val Gln Met Met Thr Glu Ala Val Glu		
1795	1800	1805
Asp Leu Thr Thr Thr Leu Asn Glu Ala Ala Ser Ala Ala Gly Val Val		
1810	1815	1820
Gly Gly Met Val Asp Ser Ile Thr Gln Ala Ile Asn Gln Leu Asp Glu		
1825	1830	1835
Gly Pro Met Gly Glu Pro Glu Gly Ser Phe Val Asp Tyr Gln Thr Thr		
1845	1850	1855
Met Val Arg Thr Ala Lys Ala Ile Ala Val Thr Val Gln Glu Met Val		
1860	1865	1870
Thr Lys Ser Asn Thr Ser Pro Glu Glu Leu Gly Pro Leu Ala Asn Gln		
1875	1880	1885
Leu Thr Ser Asp Tyr Gly Arg Leu Ala Ser Glu Ala Lys Pro Ala Ala		
1890	1895	1900
Val Ala Ala Glu Asn Glu Glu Ile Gly Ser His Ile Lys His Arg Val		
1905	1910	1915
Gln Glu Leu Gly His Gly Cys Ala Ala Leu Val Thr Lys Ala Gly Ala		
1925	1930	1935
Leu Gln Cys Ser Pro Ser Asp Ala Tyr Thr Lys Lys Glu Leu Ile Glu		
1940	1945	1950
Cys Ala Arg Arg Val Ser Glu Lys Val Ser His Val Leu Ala Ala Leu		
1955	1960	1965
Gln Ala Gly Asn Arg Gly Thr Gln Ala Cys Ile Thr Ala Ala Ser Ala		
1970	1975	1980
Val Ser Gly Ile Ile Ala Asp Leu Asp Thr Thr Ile Met Phe Ala Thr		
1985	1990	1995
Ala Gly Thr Leu Asn Arg Glu Gly Thr Glu Thr Ser Ala Asp His Arg		
2005	2010	2015
Glu Gly Ile Leu Lys Thr Ala Lys Val Leu Val Glu Asp Thr Lys Val		
2020	2025	2030
Leu Val Gln Asn Ala Ala Gly Ser Gln Glu Lys Leu Ala Gln Ala Ala		

2035				2040				2045							
Gln	Ser	Ser	Val	Ala	Thr	Ile	Thr	Arg	Leu	Ala	Asp	Val	Val	Lys	Leu
2050															
Gly	Ala	Ala	Ser	Leu	Gly	Ala	Glu	Asp	Pro	Glu	Thr	Gln	Val	Val	Leu
2065															
Ile	Asn	Ala	Val	Lys	Asp	Val	Ala	Lys	Ala	Leu	Gly	Asp	Leu	Ile	Ser
Ala	Thr	Lys	Ala	Ala	Ala	Gly	Lys	Val	Gly	Asp	Asp	Pro	Ala	Val	Trp
Gln	Leu	Lys	Asn	Ser	Ala	Lys	Val	Met	Val	Thr	Asn	Val	Thr	Ser	Leu
Leu	Lys	Thr	Val	Lys	Ala	Val	Glu	Asp	Glu	Ala	Thr	Lys	Gly	Thr	Arg
Ala	Leu	Glu	Ala	Thr	Thr	Glu	His	Ile	Arg	Gln	Glu	Leu	Ala	Val	Phe
Cys	Ser	Pro	Glu	Pro	Pro	Ala	Lys	Thr	Ser	Thr	Pro	Glu	Asp	Phe	Ile
Arg	Met	Thr	Lys	Gly	Ile	Thr	Met	Ala	Thr	Ala	Lys	Ala	Val	Ala	Ala
Gly	Asn	Ser	Cys	Arg	Gln	Glu	Asp	Val	Ile	Ala	Thr	Ala	Asn	Leu	Ser
Arg	Arg	Ala	Ile	Ala	Asp	Met	Leu	Arg	Ala	Cys	Lys	Glu	Ala	Ala	Tyr
His	Pro	Glu	Val	Ala	Pro	Asp	Val	Arg	Leu	Arg	Ala	Leu	His	Tyr	Gly
Arg	Glu	Cys	Ala	Asn	Gly	Tyr	Leu	Glu	Leu	Leu	Asp	His	Val	Leu	Leu
Thr	Leu	Gln	Lys	Pro	Ser	Pro	Glu	Leu	Lys	Gln	Gln	Leu	Thr	Gly	His
Ser	Lys	Arg	Val	Ala	Gly	Ser	Val	Thr	Glu	Leu	Ile	Gln	Ala	Ala	Glu
Ala	Met	Lys	Gly	Thr	Glu	Trp	Val	Asp	Pro	Glu	Asp	Pro	Thr	Val	Ile
Ala	Glu	Asn	Glu	Leu	Leu	Gly	Ala	Ala	Ala	Ala	Ile	Glu	Ala	Ala	Ala
Lys	Lys	Leu	Glu	Gln	Leu	Lys	Pro	Arg	Ala	Lys	Pro	Lys	Glu	Ala	Asp
Glu	Ser	Leu	Asn	Phe	Glu	Glu	Gln	Ile	Leu	Glu	Ala	Ala	Lys	Ser	Ile
Ala	Ala	Ala	Thr	Ser	Ala	Leu	Val	Lys	Ala	Ala	Ser	Ala	Ala	Gln	Arg
Glu	Leu	Val	Ala	Gln	Gly	Lys	Val	Gly	Ala	Ile	Pro	Ala	Asn	Ala	Leu
Asp	Asp	Gly	Gln	Trp	Ser	Gln	Gly	Leu	Ile	Ser	Ala	Ala	Arg	Met	Val
Ala	Ala	Ala	Thr	Asn	Asn	Leu	Cys	Glu	Ala	Ala	Asn	Ala	Ala	Val	Gln
Gly	His	Ala	Ser	Gln	Glu	Lys	Leu	Ile	Ser	Ser	Ala	Lys	Gln	Val	Ala
Ala	Ser	Thr	Ala	Gln	Leu	Leu	Val	Ala	Cys	Lys	Val	Lys	Ala	Asp	Gln
Asp	Ser	Glu	Ala	Met	Lys	Arg	Leu	Gln	Ala	Ala	Gly	Asn	Ala	Val	Lys
Arg	Ala	Ser	Asp	Asn	Leu	Val	Lys	Ala	Ala	Gln	Lys	Ala	Ala	Ala	Phe

2465 2470 2475 2480
 Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly
 2485 2490 2495
 Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu
 2500 2505 2510
 Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln
 2515 2520 2525
 Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His
 2530 2535 2540

<210> 1703

<211> 346

<212> DNA

<213> Homo sapiens

<400> 1703

ggatccccgag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta
 60
 ggaatctgtg atggagaaga atgactcctc ttcttctctg agtcctgtag taatgcattc
 120
 tctgtcttac cctttcccat gactgctgcc tggctctgcc tagccttgct ctgatccaca
 180
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
 240
 gactctcctt tgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg
 300
 tgaatgactg tgccatccat ggccaccaag ttccctttct ctgct
 346

<210> 1704

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1704

Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
 1 5 10 15
 His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
 20 25 30
 Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
 35 40 45
 Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
 50 55 60
 Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
 65 70 75 80
 Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
 85 90 95
 Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
 100 105

<210> 1705

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1705

gtgcaccttt tctcaggact cgctcagaag gtccttcttg gaggacaatg gacaagacta
 60
 aaccatcaaa tccattctca atgggtcaaa ttccaaatct tcctgaaggg ctggcttcta
 120
 ctgggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagtta tttaatcctg
 180
 gttttggctg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc
 240
 ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
 300
 cttttaactc tgcccctgca ccacagatgg aatttccac agttcctcca tacaaccctc
 360
 cttccttcgg agctagc
 377

<210> 1706

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
		35					40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
		50				55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65				70					75					80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
				85					90					95	
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105					110		

<210> 1707

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1707

nnttcggtga accgaagcc cggacgcagc gccgataccc atgtgcgcc agtactacgc
 60
 catcacgcca agcgagtgt catcatcgagg gccgggctag ccggcatgga ggctgcgcga
 120
 gttctcagcg aacgcgcaca cgaacctctc atcgctcagg ccagcgacca cattggcgga
 180
 gtcacccctg cgggtgtgca accttccttc aaggaggacg acctagctct gctggagtgg
 240
 taccgcacca ccttgaggga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
 300

gatcttatcg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggcgcgt
 360
 cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgtct gctcaaccgc
 420
 gacgcgt
 427

<210> 1708
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1708
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg
 1 5 10 15
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
 20 25 30
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
 35 40 45
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
 50 55 60
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
 65 70 75 80
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
 85 90 95
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
 100 105 110
 Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala
 115 120 125
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
 130 135 140

<210> 1709
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 1709
 acgcgtgaag gggaccagga ggttgacac agaccattgc aatggaaatg atgatttaga
 60
 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac
 120
 ctcctcttcc agccacatca tatctcagcc tcttgaggga aactcccata gcttgtctct
 180
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
 240
 caggttggtg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
 360
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac
 420
 tgcctgtgct cgtttgtgca aaattt
 446

<210> 1710
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1710
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser His Ile Ile Ser
 1 5 10 15
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 20 25 30
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35 40 45
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50 55 60
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65 70 75 80
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85 90 95
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 100 105 110
 Phe Val Lys Ile
 115

<210> 1711
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1711
 ngggggattc atgtagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag
 60
 cactagaaca tgaacagga aagcagagga aatacttgta gaaagtattt tttagagctc
 120
 cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
 180
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
 240
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgctca cgcacctttt
 300
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
 360
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gcccagaat
 420
 ggatat
 426

<210> 1712
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1712
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1           5           10           15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20           25           30
Arg Thr His Ser Ile Ser Gln Ala Glu Ala Val Val Ser Gly Gly
      35           40           45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50           55           60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65           70           75           80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85           90           95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100          105          110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1713

```

tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccttggtgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggctcatgatg aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgctcctgg
180
aatgagcctc actccctccc tgctcaaggc agcccttcac ccagccgccc ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcatctg gctggtgact cctggggg
328

```

<210> 1714

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
  1           5           10           15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20           25           30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35           40           45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50           55           60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65           70           75           80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85           90           95
Ser Gly Trp

```

<210> 1715

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1715

gttgccagcg atgggcccga tttgtacatc ccggtatttc gtgttcggtg tgggtgaaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattgtag cattatttga caagttctag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt
 240
 aatatggtgt tttttggcca actcgggaagc cggggtgtcg gggaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctgt ccaagggttcg
 360
 aactcattac cgtcgaatac gacgctgtcg ccacgcggcg tgtcgaatcg aatcctcaaa
 420
 gtgtatccgt actcgggtgc gcgcaacagg tgccctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1716

Met	Ala	Cys	His	Gly	Val	Val	Phe	Tyr	Val	Val	Lys	Tyr	Glu	Thr	Ile
1				5					10					15	
His	Gly	Asn	Met	Val	Phe	Phe	Gly	Gln	Leu	Gly	Ser	Arg	Gly	Val	Gly
		20					25					30			
Glu	Val	Gly	Pro	Cys	Lys	Val	Trp	Ala	Cys	Pro	Asn	Asp	Asp	Val	Cys
		35					40				45				
Trp	Val	His	Glu	Glu	Phe	Val	Gln	Gly	Ser	Asn	Ser	Leu	Pro	Ser	Asn
		50				55				60					
Thr	Thr	Leu	Ser	Pro	Ser	Ala	Val	Ser	Asn	Arg	Ile	Leu	Lys	Val	Tyr
65					70				75					80	
Pro	Tyr	Ser	Val	Ser	Arg	Asn	Arg	Cys	Leu	Thr	Ser	Ala	Leu	Val	Gly
				85					90					95	
Cys	Ala	Leu	Thr	Arg											
				100											

<210> 1717

<211> 312

<212> DNA

<213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgg aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccc
 120
 aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5					10					15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70				75					80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
			85						90					95	
Leu	Arg	Cys	Met	Pro											
			100												

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggcctgcca tttttgtcg ggaccgcaga ccgtatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggt
 120
 ccaacagttt ctccaacctc ataggtagaa gaagtgtctat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
 240
 gtttctgtga tggatcgctg gaccggtgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 ccagcagag ccacgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcaccat tggtngtgg tgtccccggg gggt
 404

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccatggccac cctttcagga cagagctgcc cttcccatgc tggaggagcc acagggcctg
 60
 gtcgtgtggt cttcagctc ccagctctc ctgtctctg ctgggcactt gtaatgtcca
 120
 ggcactccct gcttgatca ggggatctgg gtttcattt cccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgcttgatt gggggatctg ggtttcatt
 240
 tcccagctcc tctgtctc cgctgggcac ctgtgatgtc caggcactcc ctgcttgat
 300
 cgggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac
 360
 tctgcagagc taccctcgc catctcttcc acgcgggct cctgcagtct ctgtgtcac
 420
 cctgtgactc tgcttcgggt gttgtcaaat ggggggtcac ccaggaccg caccactggg
 480
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
 20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
 35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
 50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
 65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
 85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
 100          105          110
Phe Thr Gln Ala Pro Ser
 115

```

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgccca tcgggtcaaa tggggtgacg
 60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cggtgatgtc gacgctcgcc
 120
ggtttgccct ggcggctgtc aatggtgcca atcttcccg tggattgttg aatggcagtg
 180
gcaaagttag gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
 240
tgcccaatgt gaatgccag tggcttctct ttgctggccg ccggctgtct tgttgccagt
 300
gtcgcgccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggtgatcgc
 360
tgattcaat a
 371

```

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
 20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
 35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
 50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

65				70				75				80			
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85					90				95			
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
			100					105				110			

<210> 1725
 <211> 807
 <212> DNA
 <213> Homo sapiens

<400> 1725
 nggtcacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
 60
 atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctcccct tctctaggac
 120
 catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
 180
 gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
 240
 gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
 300
 gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact
 360
 agtgctggag atactcgcca ggttgagggtg ctcaagaagg agctgctccg gacacaggag
 420
 gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggag acaccgggac
 480
 cgggagttgg agaagcagct ggcggctctg agggctcgagg ctgatcgagg tcgggagctg
 540
 gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
 600
 gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggac
 660
 gcagtggaga cgacgcttcg ggagacccag gaggaaaatg acgaattccg ccggcgcatc
 720
 ctgggtttgg agcagcagct gaaggagact cgaggctctg tggatggtgg ggaagcgggtg
 780
 gaggcacgac tacgggacaa gctgcag
 807

<210> 1726
 <211> 230
 <212> PRT
 <213> Homo sapiens

<400> 1726
 Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val
 1 5 10 15
 Arg Gly Leu Gln Arg Glu Leu Glu Glu Thr Ser Glu Glu Thr Gly His
 20 25 30
 Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys
 35 40 45
 Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

50	55	60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg		
65	70	75
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu		80
	85	90
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser		95
	100	105
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu		110
	115	120
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln		125
	130	135
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu		140
145	150	155
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu		160
	165	170
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu		175
	180	185
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu		190
	195	200
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg		205
	210	215
Leu Arg Asp Lys Leu Gln		220
225	230	

<210> 1727

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1727

aaccaactct ccacaacatc gccagaaaca gtcgctgcc agaggctcca ccatgtttta
60

gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggacatt
120

atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180

acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaacc aatttcccc
240

aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaaacagac
300

cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaaccctt taccaaaaaa
360

caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420

gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

<210> 1728

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

1	5	10	15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln			
20	25	30	
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys			
35	40	45	
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu			
50	55	60	
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln			
65	70	75	80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys			
85	90	95	
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu			
100	105	110	
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val			
115	120	125	
Gln Leu			
130			

<210> 1729

<211> 470

<212> DNA

<213> Homo sapiens

<400> 1729

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acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
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aggatcgacg tgtggctgtg gtcggtgccc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaaccggcgc ataccgtcac catccacacc cccggatggg accgggtcct caaggatcac
240
aaccgatca cgaaaagagt cggcgccaaa ctgcgggtcg aggettacga agatctgtca
300
nngccccccg accgcctac ctctctgnet cccctcgccc gccgcgaccg tgggggtgga
360
cgaccaccca agaaggatcg tcgcgagatc gatcggtccc gaggcgggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgccg ccgaattggc
470

```

<210> 1730

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1730

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp			
1	5	10	15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala			
20	25	30	
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser			
35	40	45	
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp			

50		55		60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala				
65	70	75	80	
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro				
	85	90	95	
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg				
	100	105	110	
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp				
	115	120	125	
Ser Arg Tyr				
130				

<210> 1731

<211> 534

<212> DNA

<213> Homo sapiens

<400> 1731

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agcgcctccct gcctgctgct gggcgaggagg aaggcgaggaa gagctgcgga gccctggaa
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gagcttccag gaacctgctg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tctgacctc tctgtcccg
180
ccctgcccc gtctcaccat ggccttcttg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccggtccag ctctgggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcttggtggc tgttcgccac tcccaccgc ccctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctgggtcca gggctctcatc
420
tgtaatgtga acaacacctg ctttcgcgag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg ctgctacgtc ggagagaggc tgga
534

```

<210> 1732

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1732

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met				
1	5	10	15	
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro				
	20	25	30	
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro				
	35	40	45	
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala				
	50	55	60	
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr				
65	70	75	80	
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn				

85 90 95
 Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly
 100 105 110

<210> 1733
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 1733
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 60
 ggacatgccg tggctgatcc gcgacatcac cctcggcaac aacgtgatcg cgggcagcac
 120
 gggcaactgc accctctgcg tcgaggacta ctgcgcagg tacgcggcga ggatcctcaa
 180
 catcgtctcc gacggcaacg tcctgcagcg cgcacggcc gcacagccag cgtggctggt
 240
 tgggtgtggtc gcggggatca gcgaactccg atccgtacgt attctccagc ctgcagcgtt
 300
 accgggcgac cactggtttt taggaccttc gctcggcttc gatcgatggc gtgctgtcac
 360
 cgcgcccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg
 409

<210> 1734
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1734
 Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro
 1 5 10 15
 Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn
 20 25 30
 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr
 35 40 45
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn
 50 55 60
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val
 65 70 75 80
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg
 85 90 95
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp
 100 105 110
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp
 115 120 125
 Leu Lys Ala Val Thr Arg
 130

<210> 1735
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 1735

ggcgccatgg tcacagcat catgtgttcg ggcggcgctg cacgaatgtt cgtgcgatca
60
agcgcgccctt ttatgttcgac gcacggtaaa gcccgctgcg atcgatgtag gccaggaccg
120
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
180
cggacaccgc aagcggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg
240
ccaaggggtc acttaccgac cgcgcgccca gcaggttgcg caaggcatcc ggcggttcgc
300
tggcgccatc cgggcgttgc aaaaccagga tgtggcaatg ct
342

<210> 1736

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
			35				40					45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50					55					60				
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65					70					75				80	
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
			85						90				95		
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105					110		

<210> 1737

<211> 506

<212> DNA

<213> Homo sapiens

<400> 1737

acgcgtgttc accatgacct ggaccgcccc gcggcccgac gggtcgagcg cggaggagtc
60
ggacgagacg actgtgttgg tccttgccat ctacgcgcc cacgggtacg acgtgcaggc
120
gtccggcgcc cagtcacct cccaccagg cgaccgggtg gcgcggttgc acctcaacca
180
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
240
ccgacctata agtctccag acacttttac gaccggccct ccccttggg gtgggccccg
300
tccttttctg gtctgtggat gcacctggca gcaccacctc cgcccccat ggagaacagt
360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
 420
 gtcttagggc catactgccg ccacgcagct gagacgggtga ccaatcgggt aagggtgactg
 480
 gttgccgtag tccatgcgag gccggc
 506

<210> 1738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1738

Met	Ala	Leu	Arg	Arg	Gln	Trp	Gln	Ala	Trp	Asn	Val	Lys	Tyr	Ala	Leu
1				5					10					15	
Ala	Val	Val	Pro	Cys	Glu	Asp	Thr	Tyr	Cys	Ser	Pro	Trp	Gly	Pro	Glu
			20					25					30		
Val	Val	Leu	Pro	Gly	Ala	Ser	His	Asp	Thr	Lys	Arg	Thr	Gly	Pro	Thr
		35					40					45			
Pro	Arg	Gly	Arg	Ala	Gly	Arg	Lys	Ser	Val	Trp	Glu	Thr	Tyr	Arg	Ser
	50					55					60				
Val	Leu	Lys	Thr	Leu	Glu	Gly	Leu	Ala	Gln	Gly	Asp	Arg	Asp	Leu	Arg
65				70					75					80	
Arg	Gly	Thr	Ala	Leu	Val	Glu	Val	Gln	Pro	Arg	His	Pro	Val	Ala	Trp
			85					90						95	
Val	Gly	Gly	Asp	Val	Gly	Ala	Gly	Arg	Leu	His	Val	Val	Pro	Val	Gly
			100					105					110		

Arg

<210> 1739

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1739

cgcggtattg aaaatgctgc tttttttact aaattaggac agcgtttaac cggcgcatta
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 catcaagtga cggttgatgg atttggttac cgtgttgata tgcgggttacg ccccttttga
 120
 gagtctgggc cattgggttag cacgtttaat tcaatagagg actattatca aaccatggt
 180
 cgagagtggg agtggtatgc catggttaaa gcccggtgta ttggtgttga ggacgagtat
 240
 aaacaagcgt tagaaaggat gtaaggcct ttcgtattta gacgttacat tgatttttagc
 300
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg
 360
 ttaaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtggctcaa
 420

<210> 1740

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1           5           10           15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
 20           25           30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
 35           40           45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
 50           55           60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
 65           70           75           80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
 85           90           95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
100           105           110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
115           120           125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
130           135           140

```

<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

```

nnacgcgctcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
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gggcaggtcg acgtcgtcgt ctccaaccgc ccctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gcccacggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgtc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccgc gctggtag
378

```

<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1           5           10           15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
 20           25           30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

35 40 45
 Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly
 50 55

<210> 1743

<211> 4121

<212> DNA

<213> Homo sapiens

<400> 1743

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 120
 ctgggtcggg atgtcactga gaagatggat gtgctgggca ccgtgggaag ctgtggggcc
 180
 cccaacttcc ggcaggtgca gggtagggctc actgtgttcg gcatgggaca gccagcctc
 240
 tcagggttca ggcgggtcct ccagaaactc cagaaggacg gacataggga gtgtgtcatc
 300
 ttctgtgtgc gggaggaacc tgtgtctttc ctgctgtcag atgaggactt tgtgtcctac
 360
 acacctcgag acaagcagaa cttcatgag aacctccagg gccttggacc cggggtcagg
 420
 gtggagagcc tggagctggc catccggaaa gagatccacg actttgcccc gctgagcgag
 480
 aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccc atgtgtggcc
 540
 atccatggtg aggacgactt gcatgtgacg gaggaggtgt acaagcggcc cctcttctcg
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 660
 cagttggacg ctttctcag tgttctccg gagaccccc gcctgtgca gctccgtgat
 720
 gccacgggc ctccccagc ctcgtcttc agctgccaga tgggcgtggg caggaccaac
 780
 ctgggcatgg tcctgggac ctcacatctg cttaccgca gtgggaccac ctcccagcca
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 900
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 960
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 1020
 ggtatccgac cggagagccc agcccaggga agcggcagcc gacacagcgt ctggcagagg
 1080
 gcgctgtgga gcctggagcg atacttctac ctgatcctgt ttaactacta cttcatgag
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 1260
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 1320

atggatgtgg ccaacttccg gcgggtgccc cgcattgccc tctacggcac ggcccagccc
1380
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1680
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1740
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1800
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1860
cacatccaag gcttccccga ggtgggtgag gaggagctcg tgagtgtgcc tgatgccaag
1920
ttcactaagg gtgaatttca ggtagtaatg aagggtgtgc agctgctacc cgatgggcac
1980
cgtgtgaaga aggaggtgga cgcagcgtg gacactgtca gcgagaccat gacgcccag
2040
cactaccacc tgcgggagat catcatctgc acctaccgcc aggcgaaggc agcgaagag
2100
gcgcaggaag tgcggaggct gcagctgcgg agcctgcagt acttgagcg ctatgtctgc
2160
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2220
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2280
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2340
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2400
ctccctgtcc cccacccac agggccccc gcaggcctgg ggtgtctgag gtgctcttgg
2460
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2520
gagcggagtt gggagcctt ttagaaagaa ctttttatag gacagggaga cagcacagcc
2580
atcccttgca aaccaccaag gtgtgtggct gacctcagg gaggagcact cactggagtg
2640
ctcacaagg gcacactgct gtgtgtacct tgcagacagg ccggcgttca gctccaagg
2700
ggctcactcc ccagttgcc aaacactgtg gatctctctg tctcttctc cctctctca
2760
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2820
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2940

gcagcttcac ccagttttct ggactctcat gcccccatct ccgacctggg agacttcagg
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 aatgacaacc taccagcct ggtggggctg gcaggatggt ggaggtttct caaggagctg
 3060
 gagacttcag ggagccctc tcatggggag gaaagagctt ccagggggcg aacgcagcac
 3120
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 3240
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 3360
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 3480
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 3540
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 3600
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 3660
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 3720
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 3780
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 3840
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 3900
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 3960
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 4020
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<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
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Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20						25					30	
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40					45			
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

50	55	60
Gln Val Gln Gly Gly Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu		
65	70	75
Ser Gly Phe Arg Arg Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg		80
	85	90
Glu Cys Val Ile Phe Cys Val Arg Glu Pro Val Leu Phe Leu Arg		95
	100	105
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu		110
	115	120
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu		125
	130	135
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu		140
	145	150
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro		155
	165	170
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu		175
	180	185
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg		190
	195	200
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala		205
	210	215
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp		220
	225	230
Ala His Gly Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val		235
	245	250
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His		255
	260	265
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys		270
	275	280
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met		285
	290	295
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr		300
	305	310
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln		315
	325	330
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly		335
	340	345
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr		350
	355	360
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu		365
	370	375
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu		380
	385	390
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg		395
	405	410
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro		415
	420	425
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg		430
	435	440
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala		445
	450	455
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg		460
	465	470
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp		475
		480

485										490				495			
Gly	His	Thr	Tyr	Ser	Leu	Arg	Trp	Pro	Gly	Pro	Pro	Val	Ala	Pro	Asp		
500								505				510					
Gln	Leu	Glu	Thr	Leu	Glu	Ala	Gln	Leu	Lys	Ala	His	Leu	Ser	Glu	Pro		
515								520				525					
Pro	Pro	Gly	Lys	Glu	Gly	Pro	Leu	Thr	Tyr	Arg	Phe	Gln	Thr	Cys	Leu		
530								535				540					
Thr	Met	Gln	Glu	Val	Phe	Ser	Gln	His	Arg	Arg	Ala	Cys	Pro	Gly	Leu		
545								550				555					
Thr	Tyr	His	Arg	Ile	Pro	Met	Pro	Asp	Phe	Cys	Ala	Pro	Arg	Glu	Glu		
				565				570				575					
Asp	Phe	Asp	Gln	Leu	Leu	Glu	Ala	Leu	Arg	Ala	Ala	Leu	Ser	Lys	Asp		
580								585				590					
Pro	Gly	Thr	Gly	Phe	Val	Phe	Ser	Cys	Leu	Ser	Gly	Gln	Gly	Arg	Thr		
595								600				605					
Thr	Thr	Ala	Met	Val	Val	Ala	Val	Leu	Ala	Phe	Trp	His	Ile	Gln	Gly		
610								615				620					
Phe	Pro	Glu	Val	Gly	Glu	Glu	Glu	Leu	Val	Ser	Val	Pro	Asp	Ala	Lys		
625				630				635				640					
Phe	Thr	Lys	Gly	Glu	Phe	Gln	Val	Val	Met	Lys	Val	Val	Gln	Leu	Leu		
				645				650				655					
Pro	Asp	Gly	His	Arg	Val	Lys	Lys	Glu	Val	Asp	Ala	Ala	Leu	Asp	Thr		
660								665				670					
Val	Ser	Glu	Thr	Met	Thr	Pro	Met	His	Tyr	His	Leu	Arg	Glu	Ile	Ile		
675								680				685					
Ile	Cys	Thr	Tyr	Arg	Gln	Ala	Lys	Ala	Ala	Lys	Glu	Ala	Gln	Glu	Met		
690				695				700									
Arg	Arg	Leu	Gln	Leu	Arg	Ser	Leu	Gln	Tyr	Leu	Glu	Arg	Tyr	Val	Cys		
705				710				715				720					
Leu	Ile	Leu	Phe	Asn	Ala	Tyr	Leu	His	Leu	Glu	Lys	Ala	Asp	Ser	Trp		
				725				730				735					
Gln	Arg	Pro	Phe	Ser	Thr	Trp	Met	Gln	Glu	Val	Ala	Ser	Lys	Ala	Gly		
740								745				750					
Ile	Tyr	Glu	Ile	Leu	Asn	Glu	Leu	Gly	Phe	Pro	Glu	Leu	Glu	Ser	Gly		
755								760				765					
Glu	Asp	Gln	Pro	Phe	Ser	Arg	Leu	Arg	Tyr	Arg	Trp	Gln	Glu	Gln	Ser		
770				775				780									
Cys	Ser	Leu	Glu	Pro	Ser	Ala	Pro	Glu	Asp	Leu	Leu						
785				790				795									

<210> 1745

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1745

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ntcatgaaaa ttaaaaaatg gcttgggtga gcagcccttg ctacagtcgc aggtttggct
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120
actgttaacc gtagcgggtc tgaagaaaaa cgttgggaca aaatccaaga attggttaaa
180
aaagacggta tcactttgga atttacggag ttcacaggct actcacaacc aaacaaggca
240

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actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg
 300
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt
 360
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 420
 tcgcga
 426

<210> 1746

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1746

Xaa	Met	Lys	Ile	Lys	Lys	Trp	Leu	Gly	Val	Ala	Ala	Leu	Ala	Thr	Val
1			5					10					15		
Ala	Gly	Leu	Ala	Leu	Ala	Ala	Cys	Gly	Asn	Ser	Glu	Lys	Lys	Ala	Asp
		20					25				30				
Asn	Ala	Thr	Thr	Ile	Lys	Ile	Ala	Thr	Val	Asn	Arg	Ser	Gly	Ser	Glu
		35				40					45				
Glu	Lys	Arg	Trp	Asp	Lys	Ile	Gln	Glu	Leu	Val	Lys	Lys	Asp	Gly	Ile
	50				55				60						
Thr	Leu	Glu	Phe	Thr	Glu	Phe	Thr	Gly	Tyr	Ser	Gln	Pro	Asn	Lys	Ala
65			70					75			80				
Thr	Ala	Asp	Gly	Glu	Val	Asp	Leu	Asn	Ala	Phe	Gln	His	Tyr	Asn	Phe
		85					90				95				
Leu	Asn	Asn	Trp	Asn	Lys	Glu	Asn	Gly	Lys	Asp	Leu	Val	Ala	Ile	Ala
		100				105					110				
Asp	Thr	Tyr	Ile	Ser	Pro	Ile	Arg	Leu	Tyr	Ser	Gly	Leu	Asn	Gly	Ser
	115					120					125				
Asp	Asn	Lys	Tyr	Thr	Lys	Val	Glu	Ala	Gly	Val	Cys	Ser	Arg		
	130					135					140				

<210> 1747

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1747

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 120
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
 180
 acttccccca acttctctcc cttaactgg acagacggag aagacattct ggttcagag
 240
 ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg
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 360
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 373

<210> 1748
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1748
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
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 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
 20 25 30
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
 35 40 45
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
 50 55 60
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
 65 70 75 80
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
 85 90 95
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
 100 105 110
 Ala

<210> 1749
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 1749
 cccagcagggc aaagagagag gcctccctgg cttcgagtgt caggggagcc gcgtccctc
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 ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggccagat gagggccagg
 120
 aaggggagga gaggtagggc caagaacgag ccttaaggga gcagtcctaa gctggagcca
 180
 cccagggctg ggtctgggag tctcagtggt ccactgtgcc caggttaggg ggcttgctt
 240
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc
 300
 caggatgtac aagggtgcagc caaggcaggg catgcagggg ccgggcctgt ctgcagctgg
 360
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 420
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 480
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccctc
 540
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 720

ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
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 840
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 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
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 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
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 60
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg
 120
 gcatggtctt ccctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca
 180
 caggagcccg agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag
 240
 atcgacctcc tggagcgggt ccgaggactc ggctgacga cggtcaccgt cattcatgac
 300
 ctgacttgg ctgccgccta cgcgacgac ctcatcgtgc tcgactcggg tcgcatggtt
 360
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttggtgtc
 420
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga
 480
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c
 531

<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

1	5	10	15
Arg Gln Gly	His Asp Asp	Ala Val Val	Glu Lys Ala Met Ala Thr Thr
	20	25	30
Gly Val Ser	Glu Leu Thr	Asp Arg Ala	Trp Ser Ser Leu Ser Gly Gly
	35	40	45
Glu Arg Gln	Arg Val Gln	Leu Ala Arg	Ala Leu Ala Gln Glu Pro Glu
	50	55	60
Ile Leu Phe	Leu Asp Glu	Pro Thr Asn	His Leu Asp Leu Pro His Gln
	65	70	75
Ile Asp Leu	Leu Glu Arg	Val Arg Gly	Leu Gly Leu Thr Thr Val Thr
	85	90	95
Val Ile His	Asp Leu Asp	Leu Ala Ala	Tyr Ala Asp Asp Leu Ile
	100	105	110
Val Leu Asp	Ser Gly Arg	Met Val Ala	Gly Gly Pro Ala Ser Thr Val
	115	120	125
Leu Thr Pro	Gly Leu Val	Arg Asp His	Phe Gly Val Asp Gly Glu Val
	130	135	140
Trp Ser Ser	Ser Arg Arg	Gly Phe Thr	Trp Asn Gly Leu Gln Thr
	145	150	155

<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

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 120
 acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
 180
 ccacccacga gaagggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac
 240
 cctgggttcg aggggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
 300
 atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccccctgc agatgctgtt
 360
 gggggccntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
 420
 gagccccggc gctgtgcttc ctgtcggacc cagaggacct cgtcttgag agacgctgaa
 480
 gatgggacct ttctctgcaa cgctgtggg atcaggtaca agaaatacgg cactcgtctg
 540
 tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
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 660
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 720
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 780
 ccaggcctca ggtggcagag cctgctaggg gtcaccagcc cttctccag tcagccttgg
 840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1754
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
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 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
 20 25 30
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
 35 40 45
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
 50 55 60
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
 65 70 75 80
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
 85 90 95
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
 100 105 110
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
 115 120 125
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
 130 135 140
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
 145 150 155 160
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
 165 170 175
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
 180 185 190
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
 195 200 205
 Glu Gly
 210

<210> 1755
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1755
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 120
 ttggttgta cagattttct accaacaatg ccttgactt gcctgcaa atgtgttagat
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaatagg
 240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggagcaca gcaaaagcag gcagaagaga aaggagtgtg tttaaatcgg
 360
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 420
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 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

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Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
		20					25					30			
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
		35				40					45				
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50				55					60					
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65				70					75					80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85					90					95		
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
		100					105						110		
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
		115					120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

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 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccccttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcga
 660
 tcacctgac accgccggag aagctaccga gacttggaaca agccccgtcg ctctcccaca
 720
 ctgcgtaca ggaggagtag gagccgggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
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 900
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
 960
 agagggaatg agtaatggac tcagtttggt tttagtccac atggcctcct gtggatataa
 1020
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 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
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 1260
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 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

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1				5					10					15	
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20						25				30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
			35				40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
				85					90					95	
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
			100					105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
		115					120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130					135					140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

145 150 155 160
 Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
 165 170 175
 Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
 180 185 190
 Ser Ser Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
 195 200 205
 Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
 210 215 220
 Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
 225 230 235 240
 Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
 245 250 255
 Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
 260 265 270
 Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
 275 280 285
 Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
 290 295 300
 Lys Lys Ser Arg Arg Gly Asn Glu
 305 310

<210> 1759
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 1759
 aattccatag tctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
 60
 ggccctgggca gacacaatta ttgtcggaat ccagatgggtg atgccagacc ttggtgccat
 120
 gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
 180
 ggccctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
 240
 acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
 300
 ttcctttgtg gaggggtgct gatc
 324

<210> 1760
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1760
 Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
 1 5 10 15
 Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
 20 25 30
 Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
 35 40 45
 Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

50 55 60
 Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
 65 70 75 80
 Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
 85 90 95
 Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
 100 105

<210> 1761

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1761

ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
 60
 aataaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
 120
 agccattcat tgtaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
 180
 gagaggaaga gaggagaaag gaagagcggg gaggcgggtg ggagcccgc gtaagacccc
 240
 acagtggggc caggtggtct tgcacctgt attccactt tggctggggc agcccagagt
 300
 ccagggcagc aggtaatgcc ccagccatgc ccaactcggtc ctattggatc c
 351

<210> 1762

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1762

Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
 1 5 10 15
 Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
 20 25 30
 Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
 35 40 45
 Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
 50 55 60
 Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
 65 70 75 80
 Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
 85 90 95
 Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
 100 105

<210> 1763

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1763

gcgcgcggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagaccttc
 120
 accatcccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1				5					10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
	35					40					45				
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
				85				90					95		
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cggccgcatt cttcgtgact ggcgccccgc cgccggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag
 120
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcgggc
 240
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggag
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnnccgcccgcac ggccgcccattg acgcaccgcga ttgacgtgaa ccagggcgac gatgcccaacc
 60
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gaggcgacg
 180
 agggacaaac ccacctggag tccgtcggtg tgcattgccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1769
 caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 cagggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tctccatac tcccgcgacc acgcattcgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa
 240
 atcctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggctgcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaacccgt gaagttgtta agcggatttg caatgcccag
 420
 gccgcctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 1770
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu
 1 5 10 15
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val
 20 25 30
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro
 35 40 45
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp
 50 55 60
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu
 65 70 75 80
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp
 85 90 95
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala
 100 105 110
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln
 115 120 125
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val
 130 135 140
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu
 145 150 155

<210> 1771
 <211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
60
taataacacg ggggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
120
caacaggctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt
180
acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaaata
240
cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10				15			
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40						45			
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65			70					75						80	
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85					90							

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctgggaggtg aacaggcgca cctcgacgtc
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ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
120
cgtccggatt ctctgggtatt gtgggaagcc caattcggcg atttcaccaa cgggtgcccag
180
acgatcatcg atgagttcat cgctcggct ggctccaagt ggggtcagaa gtcgggagtc
240
gtgctgtgc tgcgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg
300
gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
360
gcaagctaca gccatttatt gcgtcagcac gcg
393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa
 60
 cgggagggca tcgctagga ggggtggggc ggcccggctt cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccttg ccacccccac ccagagggg aagctggagc
 180
 tgggaggctg cagacccagg ccaaggtgtg gccagggtg gctttcttgg gaggtttga
 240
 gcactctgct tcttgccac ccagctctgg ggctgtgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ctccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

1           5           10           15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20           25           30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35           40           45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50           55

```

<210> 1777

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1777

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agcttctttat cactatcctt tagtgctttt tggctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcactatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattgtt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

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<210> 1778

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1778

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Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
1           5           10           15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20           25           30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35           40           45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50           55           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
      65           70           75           80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85           90           95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100          105          110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115          120

```

<210> 1779

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1779

ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
 60
 atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
 120
 gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtagggt gtgtatatct
 180
 gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
 240
 ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat gnggggtgtgt atgtacatgt
 300
 atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
 345

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
 1 5 10 15
 Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
 20 25 30
 Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
 35 40 45
 Val Cys Ile Cys Val Tyr Met
 50 55

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

nacgcgtcat gctaaatddd gccctttatg gcaacatddd cgtcagaaca agcgggaagag
 60
 aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
 120
 gatgtgaaca caacgcaaac tgggtcaage gccacgcca ttacacctgt acccttactg
 180
 cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac
 240
 aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaaactac ttgttcgcta
 300
 cgatccgcac atgatggcag catgctagtg acgaatgctg ccttcggga
 349

<210> 1782

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1782

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1 5 10 15
 Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
 20 25 30
 Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
 35 40 45
 Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
 50 55 60
 Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
 65 70 75 80
 Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
 85 90 95
 Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
 100 105

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
 60
 agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg
 120
 gatggtgaaa cagagcacc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
 180
 gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
 240
 atgctggata atcggaat ggggtgatatg cctgagatca atggaaaatt agtaaagagc
 300
 atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
 360
 ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
 420
 ggaataattg acacaaggac gaatccaggc cagttaaag eggttgaatt tctgtgggac
 480
 ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
 540
 cggaagcacg gaggtgaaaa gggagtgcct tttaggatcc aggttgacac ctttaagcag
 600
 aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
 660
 aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
 720
 gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
 780
 cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
 840
 tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
 900

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tctttctccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctggtga acaaattcag ccttcagcta cgatccagga aacacagcaa
 1080
 tggctgtca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggctctata attcactgaa gtcaaggctg gttagacccc gtttaaccat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgaagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc
 1380
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 1440
 gtttacagac aggggtccac cgggtattcac attcttgta gtgatcaggt aaatcaaact
 1500
 atttgttttt ctttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc
 1620
 actttggaag aacttataac caagagtttc aggcaccta gtgataatat ggaatacaag
 1680
 ccaaggaaaa ctggcttagc cteccccag ccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
		20						25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
		50				55					60				
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
		65				70				75				80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90						95	
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100				105						110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

115	120	125
Asp Arg Leu Leu Asp Leu Asp Ile Pro Met Ser Val Gly Ile Ile Asp		
130	135	140
Thr Arg Thr Asn Pro Gly Gln Leu Asn Ala Val Glu Phe Leu Trp Asp		
145	150	155
Pro Ala Lys Arg Thr Ser Ala Phe Ile Gln Val His Cys Ile Ser Thr		
165	170	175
Glu Phe Thr Pro Arg Lys His Gly Gly Glu Lys Gly Val Pro Phe Arg		
180	185	190
Ile Gln Val Asp Thr Phe Lys Gln Asn Glu Asn Gly Glu Tyr Thr Asp		
195	200	205
His Leu His Ser Ala Ser Cys Gln Ile Lys Val Phe Lys Pro Lys Gly		
210	215	220
Ala Asp Arg Lys Gln Lys Thr Asp Arg Glu Lys Met Glu Lys Arg Thr		
225	230	235
Ala His Glu Lys Glu Lys Tyr Gln Pro Ser Tyr Asp Thr Thr Ile Leu		
245	250	255
Thr Glu Met Arg Leu Glu Pro Ile Ile Glu Asp Ala Val Glu His Glu		
260	265	270
Gln Lys Xaa Val Gln Gln Ala Asp Phe Ala Ala Asp Tyr Gly Asp Ser		
275	280	285
Leu Ala Lys Arg Gly Ser Cys Ser Pro Trp Pro Asp Ala Pro Thr Ala		
290	295	300
Tyr Val Asn Asn Ser Pro Ser Pro Ala Pro Thr Phe Thr Ser Pro Gln		
305	310	315
Gln Ser Thr Cys Ser Val Pro Asp Ser Asn Ser Ser Ser Pro Asn His		
325	330	335
Gln Gly Asp Gly Ala Ser Gln Thr Ser Gly Glu Gln Ile Gln Pro Ser		
340	345	350
Ala Thr Ile Gln Glu Thr Gln Gln Trp Leu Leu Lys Asn Arg Phe Ser		
355	360	365
Ser Tyr Thr Arg Leu Phe Ser Asn Phe Ser Gly Ala Asp Leu Leu Lys		
370	375	380
Leu Thr Lys Glu Asp Leu Val Gln Ile Cys Gly Ala Ala Asp Gly Ile		
385	390	395
Arg Leu Tyr Asn Ser Leu Lys Ser Arg Ser Val Arg Pro Arg Leu Thr		
405	410	415
Ile Tyr Val Cys Arg Glu Gln Pro Ser Ser Thr Val Leu Gln Gly Gln		
420	425	430
Gln Gln Ala Ala Ser Ser Ala Ser Glu Asn Gly Ser Gly Ala Pro Tyr		
435	440	445
Val Tyr His Ala Ile Tyr Leu Glu Glu Met Ile Ala Ser Glu Val Ala		
450	455	460
Arg Lys Leu Ala Leu Val Phe Asn Ile Pro Leu His Gln Ile Asn Gln		
465	470	475
Val Tyr Arg Gln Gly Pro Thr Gly Ile His Ile Leu Val Ser Asp Gln		
485	490	495
Val Asn Gln Ile Ile Cys Phe Ser Phe Ser Asp Trp Tyr Leu Leu Leu		
500	505	510
Tyr Met		

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
 60
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcacia tgctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggg
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20					25					30		
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35					40					45			
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50					55					60				
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70					75					80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85					90						95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
			100					105					110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
			115				120						125		

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt
 60
 agggtcacct aacaaggaga tgagaacaaa ctttaaattct atctctctaa ggaatttgga
 120
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct
 240
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1789
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
 180
 gacctgtcc cgggggtctc tccgcaggc aggtctctc gccgagtctc cgaaaagggg
 240
 cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggatatca ccgtttctct
 300
 ctgttgtgcc cagcgccccg actgaagatc cggatcttca gtcctggcg cgc
 353

<210> 1790
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1790
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

```

<210> 1791

<211> 355

<212> DNA

<213> Homo sapiens

<400> 1791

```

aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
  60
acccccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
 120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgetttatg tggtccttgc
 180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
 240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
 300
ccactccgat tccattccc tctgtgctc tctctctct cctcccttca cgcgt
 355

```

<210> 1792

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1792

```

Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1              5              10              15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20              25              30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35              40              45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
      50              55              60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
      65              70              75              80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85              90              95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100              105

```

<210> 1793

<211> 510

<212> DNA

<213> Homo sapiens

<400> 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatata
 60
 cccccctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggtcattct aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggtt gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcatgtgtg atgggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcacgatggc caaggccgcc ggccctcat ccctgcgt cctgccacc tcgcccactg
 360
 ggcgtgatc cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcacaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55				60					
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65				70					75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85				90						95		
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
			100				105						110		
Pro	Thr	Gly	Arg												
			115												

<210> 1795

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttccct gggctgatca
 60
 tttcaagaag tcttacattc cagaaaactt gagagggtct tcttctctgg aagccctttt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttgc
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcacc agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccaggtt gagagctcca tgagggcacc aatttttgtc tgtttagctg tgcctcaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1				5				10					15		
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Ile	Lys	Gln	Lys	Ile	Ala	Asp
			20				25						30		
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40					45			
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50					55				60					
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65					70					75				80	
Glu	Val	Thr	Gln	Ser	Ile										
					85										

<210> 1797

<211> 348

<212> DNA

<213> Homo sapiens

<400> 1797

aagcttcact atgttgccca ttccatgggc ggcggtgctgg tgcgtgacct gctggcggac
 60
 cggaatttgc cgatgtcatt gatcaggtca tctgtctggg ctgcccgcag cagggctcgc
 120
 gtgcccgtaa tttgttggcg ccatttgctg ggcggcgcac cgtcaaatgg tgtatcacag
 180
 cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttgaggcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctcggaatt ttaccgggaa tgacccatgt
 300
 ggcggtggat tacctggggc attgttcgtt attgtacagc ccacgcgt
 348

<210> 1798

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
      20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
      35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
      50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
      65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
      85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
      100           105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgtcgcc tctgtctggt cgggattttc cttgctgtag ttaaccaaac caccggcgctc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccagggcg
120
tcgattatct cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
gggggtaccga agtgggcgcc tattctcgtg ctgctcctga tgagtatctt catgcttacc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
      20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
      35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
      50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
      65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

	85		90		95
His Val Gly	Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val				
	100		105		110
Leu Met Ser Ile Phe Met Leu Ile Val His					
	115		120		

<210> 1801

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1801

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aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttcgatcctg ccagcatctg ggtgacggtc
120
cttggacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
180
cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
240
catatggggg ttcccggccc cggcggcccc tgctcgaaa tctacatcga tcgtggccca
300
gcctatggtc ccgacgggtg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggccattgac gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgcctaccta
480
ctccagggcg tcgacaatat gtacgagact gaccaggtat tccctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
597

```

<210> 1802

<211> 199

<212> PRT

<213> Homo sapiens

<400> 1802

Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala														
1		5				10						15		
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp														
	20					25						30		
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp														
	35					40						45		
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly														
	50					55						60		
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp														
	65					70						75		80
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile														
		85					90						95	
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu														
	100						105						110	
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu														

115 120 125
 Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
 130 135 140
 Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
 145 150 155 160
 Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
 165 170 175
 Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
 180 185 190
 Asp Asp Asp Val Arg Leu Arg
 195

<210> 1803

<211> 708

<212> DNA

<213> Homo sapiens

<400> 1803

cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
 60
 ctcacccctgg cccatcatctc cgagatcggc accgggtggg gacaaggcca tatggctcgag
 120
 tatcgccggcg aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg
 180
 tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
 240
 ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
 300
 cgcactctgc gtactgacga cgatgcgacc ttgacgctg agatccatgt ggacgcctcg
 360
 aatctcgccc ccttcgttac ctgggggtacc aaccggggc agggatcccc cctaggcggg
 420
 gtggtgcccg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
 480
 catggatttg accccgacga gatcgggtcc cggtttgctg acatctttcg caataactct
 540
 gcgaacaacg gtttggtact ggctcaggtt gateccaagg tcgtcggaga gtttggggac
 600
 ttgcccagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
 660
 cttccgggtc gcacgaceta cccgttccat attgatgacg tcacgcgt
 708

<210> 1804

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1804

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
 1 5 10 15
 Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
 20 25 30
 Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

35	40	45
Met Ser Met Glu Gly Arg Met Thr Ile Cys Asn Met Ser Ile Glu Trp		
50	55	60
Gly Ala Arg Val Gly Met Val Ala Ser Asp Glu Thr Thr Phe Thr Tyr		
65	70	75
Leu Lys Asp Arg Pro His Ala Pro Arg Gly Ala Gln Trp Asp Lys Ala		
85	90	95
Val Ala Tyr Trp Arg Thr Leu Arg Thr Asp Asp Ala Thr Phe Asp		
100	105	110
Ala Glu Ile His Val Asp Ala Ser Asn Leu Ala Pro Phe Val Thr Trp		
115	120	125
Gly Thr Asn Pro Gly Gln Gly Ser Pro Leu Gly Gly Val Val Pro Ala		
130	135	140
Val Glu Asp Phe Glu Asp Glu Val Ala Arg Ser Ala Ala Phe Gly Val		
145	150	155
His Gly Phe Asp Pro Asp Glu Ile Gly Ser Arg Phe Ala Asp Ile Phe		
165	170	175
Arg Asn Asn Ser Ala Asn Asn Gly Leu Leu Leu Ala Gln Val Asp Pro		
180	185	190
Lys Val Val Gly Glu Leu Trp Asp Phe Ala Glu Gln His Pro Gly Glu		
195	200	205
Gln Leu Thr Leu Ser Leu Glu Asn Arg Thr Ile Asn Leu Pro Gly Arg		
210	215	220
Thr Thr Tyr Pro Phe His Ile Asp Asp Val Thr Arg		
225	230	235

<210> 1805

<211> 833

<212> DNA

<213> Homo sapiens

<400> 1805

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nccgcagtggt tgtgggacaa gaacaccggt gagccggttt ataacgccat cgtgtggcag
60
gacacgcgca ctcaaaagat ctgtaacgaa ctagctggtg acaagggcgc cgaccgctac
120
aaggagatct gtgggtctggg cctgtcgacc tatttctctg gcccgagggt caaatggatt
180
ctcgacaacg ttgagggagc ccgtgcgagg gccgaggccg gcgatctgct cttcggtaac
240
atggacactt ggggtgctgtg gaacctgact ggcggtacta acggtggcgt gcacatcacc
300
gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360
tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtctctctcc
420
gagatctacg gctatggtcg caagaacggc ctgctgatcg ataccccgat ctccggcatt
480
cttggcgatc agcaggccgc cacctttggc caggcttgc tccaaaagg catggcgaag
540
aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggagc catcttctcc
600
gagaacggtc tgctgaccac cgtctgctac aagattggtg accagccac cgtctatgcc
660

```

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag
720
atgttcgaga ccgccccgca aatcgaagcc ctgcgaaca ccgtcgagga caatgggtggc
780
gcctactttg tgccggcctt ctctggcctg ttgcgcgcgt actggcgtcc gga
833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1			5						10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50					55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75					80
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
			85						90					95	
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
		115					120					125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
	130					135						140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155					160
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
			165						170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
		180					185					190			
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
	195						200					205			
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
	210					215						220			
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235					240
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
			245						250					255	
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
		260						265					270		
Pro	Tyr	Trp	Arg	Pro											
		275													

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807

nnntatcggc aaggtggctg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
 60
 gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
 120
 acaggcacac cgggtgcgtg tgggtctcaca ttccgagaag gccactacat atgcgaggcg
 180
 gtagctgaga cgggctcgtt ggtggctatg gatatggtag aagtcaaccc ccattctgaa
 240
 aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcgttc ggcgctgggg
 300
 gagacgttc tgtaatgggt gcatgatggg cgggtgggcc atagccatgc atagacactc
 360
 cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
 420

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

His	Val	Arg	Asp	Arg	Pro	Ile	His	Leu	Ser	Phe	Asp	Val	Asp	Ala
1			5					10					15	
Met	Asp	Pro	Ser	Val	Ala	Pro	Ser	Thr	Gly	Thr	Pro	Val	Arg	Gly
			20					25				30		
Leu	Thr	Phe	Arg	Glu	Gly	His	Tyr	Ile	Cys	Glu	Ala	Val	Ala	Glu
		35				40					45			
Gly	Ser	Leu	Val	Ala	Met	Asp	Met	Val	Glu	Val	Asn	Pro	His	Leu
	50					55					60			
Lys	His	Ala	Ala	Glu	Gln	Thr	Ile	Ala	Val	Gly	Cys	Ser	Leu	Arg
	65				70					75				80
Ser	Ala	Leu	Gly	Glu	Thr	Leu	Leu							
						85								

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

nnaccgggtga tcgcatcggg gagcctcggc gcgatgcggc tgttcgacct tcgccatcgc
 60
 cagaccgggtg tcacgcatgc gtatcgcttc gggcatggca gcctcctcgt gatgcggggc
 120
 cccacccagg ccgaatggca gcacgcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
 180
 gtgaacctga cgtttcggcg cgtgatgccg gtcgggtatgg gccggtaaca accggcgctc
 240
 ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga
 300
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
 340

<210> 1810
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1 5 10 15
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
 20 25 30
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
 35 40 45
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
 50 55 60
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
 65 70 75

<210> 1811
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1811
 nnacgcgtgc taggaatagc catggactca tcatacagata catgctggat ttatacttca
 60
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttgttg
 120
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
 180
 caggtactgg aaaagaaggc cgatgcactg ctacacgcag gtcagctcat ggaggccgctc
 240
 gagtgcctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac
 300
 gtcgtgccc acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
 360
 caagctcgcg tgccctgctc catgctggct acttggtcctc ttgaattgta tgtggccgcc
 420
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
 480
 acacttgagc ggcacatga
 500

<210> 1812
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1812
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1 5 10 15
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
 20 25 30
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

35	40	45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu		
50	55	60
Lys Lys Gly Asp Ala Leu His Ala Gly Gln Leu Met Glu Ala Val		
65	70	75
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu		
85	90	95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg		
100	105	110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met		
115	120	125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His		
130	135	140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu		
145	150	155
Thr Leu Glu Arg His His		160
165		

<210> 1813

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1813

tctagagccg ttgtgatcgg tatccatggg tggatggggg tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcttcctat gggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

<210> 1814

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1814

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln		
1	5	10
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala		
20	25	30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala		
35	40	45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser		


```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815

<211> 303

<212> DNA

<213> Homo sapiens

<400> 1815

```

ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggcatcgag
60
cgccaggcgg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgata tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtgaaca cgttcgctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1816

```

Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
  1              5              10              15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20              25              30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35              40              45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50              55              60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65              70              75              80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85              90              95
Gly Thr

```

<210> 1817

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt c gatgcgtcg
 60
 catgcgtttg agcccacacg cgatggcaca cttcagggtca ttcacgcaaa gacatggatc
 120
 ccgcgtcct tatttcacat gctgcatctg cgatggccat tgcgagcagt tttttctctt
 180
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg
 240
 tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac
 300
 ttccagcagc gataccccta atcaaactcc tgtgtgggcg gcgtgtcatg tactactgtc
 360
 acttcctga caaagaaatc agcgtgtctc tggctcgaca gcgaggcacg cgt
 413

<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1			5						10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
		20						25					30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
		50				55					60				
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	
Tyr	Arg	Ala													

<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

ggatccaaga gtggggcattc aggaacatgc catggttgtc gtggtgctgg aatgagaaca
 60
 atcacaagac agataggcct tggcatgac caacagatga acactgtttg ccctgaatgc
 120
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaacaaa
 180
 gtagtccagg agaagaaggt gttagagggt catgtggaga aaggaatgca acataaccaa
 240
 aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattgtt
 300
 tttgtcttgc aacttaaaga ccatccaaaa ttaagagga tgt
 343

<210> 1820

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1820

```

Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
 1           5           10           15
Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
      20           25           30
Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
      35           40           45
Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
      50           55           60
Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
      65           70           75           80
Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
      85           90           95
Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
      100           105           110
Arg Met

```

<210> 1821

<211> 285

<212> DNA

<213> Homo sapiens

<400> 1821

```

aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat
60
gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag
120
gcccgggaaa agttgctcgc caaggaggcc gcccgcgga tgacctagat tgtctactgc
180
tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa
240
tctagtttca tatgtttctg tccaccagac catgtttaga agctt
285

```

<210> 1822

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1822

```

Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn
 1           5           10           15
Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
      20           25           30
Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys
      35           40           45
Glu Ala Ala Gln Arg Met Thr
      50           55

```

<210> 1823
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1823
 ngttggctgc tgttctgtgg cgttctgtcc ctgacgggct gcgcccgttc cgatgcgtg
 60
 tggggcgtgg tcgataagct ctgcatggcc aactatcagc aaaagcgcga tccggccccg
 120
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggt ttagcgtgct gcaaaacccg
 180
 cgttatecct atcatttcat tctggtgccg acggcgccgc ttcccgcat tgaaagcccg
 240
 ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttacccg
 300
 ctggccgccc agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc
 360
 gcttacggcc gcagccagaa ccaattg
 387

<210> 1824
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1824
 Xaa Trp Leu Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg
 1 5 10 15
 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
 20 25 30
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
 35 40 45
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
 50 55 60
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
 65 70 75 80
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
 85 90 95
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
 100 105 110
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln
 115 120 125
 Leu

<210> 1825
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1825
 gtgcacggac gaccgcgcac agggactcgt gtgccgcgca tgggacgacg gcgatgcgtg
 60

tgcgtgcata ccgctgctct ggcaggtcgt gcgtgcgatt gtcgccgaca catcgccggc
 120
 ttggcacgtc gtgattgggc gcttaggcac catgtcgcag gccgacatgg acatgtgggc
 180
 gtcgtgcctc gatacgcgcg acccttcctg ctctcgggtg gccttggtg cctggagcgc
 240
 gatgcctggc ctacggggcac gcgatgcac ggtggtctac ctgtcggaca tgccgctggg
 300
 tctggcctca ggtgcgtggc cgatccgctg gcctcgcctg gcgttatgtg tctgccggcg
 360
 cctatgccat tcattcctg cagctacgtc acctggctga tctcagcgcg gct
 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
1					5				10					15	
Arg	Ala	Cys	Asp	Cys	Arg	Arg	His	Ile	Gly	Gly	Leu	Ala	Arg	Arg	Asp
		20					25				30				
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly	Val
		35				40					45				
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Val	Cys
	50				55					60					
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly	Leu
65			70					75					80		
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp	Pro
			85					90					95		
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe	Ile
			100					105					110		
Ser	Cys	Ser	Tyr	Val	Thr	Trp	Leu	Ile	Ser	Thr	Arg				
			115					120							

<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

ctggccaact gggcgccgga cctgttcctg aagcgcgtcg aagccgacca ggaatggctg
 60
 ctgttcgacg cgcgcgtggg gccggagttc accgacctgt tcggcgaagc cttcgaagcc
 120
 gcctacctgc aggccgaagc gcagggcaag gcccaaccgca cgatctctgc ccgcaagctg
 180
 tacgcccgca tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac
 240
 aagtgcaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac
 300
 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg
 345

<210> 1828
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1828
 Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp
 1 5 10 15
 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
 20 25 30
 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
 35 40 45
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
 50 55 60
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
 65 70 75 80
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
 85 90 95
 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
 100 105 110
 Glu Thr Ala
 115

<210> 1829
 <211> 4457
 <212> DNA
 <213> Homo sapiens

<400> 1829
 attccaatgg ttgtgtctga ttttgatctt ccagaccaac agatagaaat acttcagagt
 60
 tctgactcgg gatgttcaca gtcctctgct ggggacaact tgagttacga agttgatcct
 120
 gaaaccgtga atgcccaga ggattctcaa atgcccagg aaagctcccc agatgatgat
 180
 gttcaacagg tagtatttga cctgatatgt aaagttgtaa gtggcctcga agtggaatct
 240
 gcatcagtta catctcaatt agaaattgaa gctatgcccc caaagtgcag tgatatagat
 300
 ccagatgaag agacgattaa aattgaagat gactccattc gacagagtca gaatgctttg
 360
 ctgagtaatg aaagttctca gtttctgtct gtgtctgcag agggaggcca tgagtgtgtg
 420
 gcaaatggaa tctccaggaa tagctctca ccttgtattt caggaaccac acacactctt
 480
 catgactctt ctgttgcttc catagaaacc aaatctagac aaaggagtca cagtagtatt
 540
 caattcagct tcaaagaaaa attatcagaa aaagtttcgg agaaggaaac aatagttaag
 600
 gagtcaggta aacaaccagg agcaaacct aaagtaaac ttgccagaaa aaaggatgat
 660
 gacaagaaaa aatcttcaaa tgaaaaactc aaacaaacca gtgtattctt cagtgatggt
 720

ctggatttag agaactggta tagctgtgga gagggagaca tttctgaaat tgagagtga
780
atgggttctc caggatctcg aaaatctccc aatttcaaca ttcactctct ctatcaacat
840
gtgctctgt atctccagtt gtatgattca tccaggactt tgtatgcttt ctctgccatc
900
aaagccatct tgaaaactaa ccctatagct tttgtaaag ccatttcaac tactagtga
960
aataatgcat atactctca gttgtctctc cttcagaatc tattggccag acaccggatt
1020
tctgttatgg gcaaagattt ttatagtcac attccagtgg actcaaatca taacttccgg
1080
agttctatgt acatagaaat tcttatttct ctctgcttat attacatgag tagccattac
1140
ccaactcatg tcaagggttac tgcacaagat ttaataggca atcgaaacat gcaaatgatg
1200
agcatagaaa ttctgacact actcttcact gagctggcaa aagtaataga aagctcagcg
1260
aagggtttcc ctagttttat ttctgatatg ttatctaagt gcaaagttca gaaagtgatt
1320
cttcattggt tgctgtcatc tatctttagt gctcagaaat ggcatagtga aaaaatggca
1380
ggtaagaacc tggttgctgt ggaagaaggt ttctcagagg acagccttat taatttctca
1440
gaggatgaat ttgacaatgg cagcacgttg cagtcacaac ttcttaaggt gcttcagagg
1500
ctgattgttc tagaacacag agtaatgact attcctgaag agaatgaaac aggttttgat
1560
tttgttgtat ctgacttaga acacatcagt ccccatcaac ccatgacttc tcttcagtat
1620
ttgcatgctc agccaatcac atgtcaaggc atgttcctct gtgcagtgat acgagctttg
1680
catcagcact gtgcatgtaa gatgcacca caatggattg gtttaatcac atctactctg
1740
ccttacatgg gaaaagttct gcagagagtg gttgtttctg tgacactaca actgtgcaga
1800
aatttagata atctaattca gcagtacaaa tacgaaacag gattatctga tagtaggcct
1860
ctgtggatgg catcaattat tccaccagat atgattctta ctcttttgga agggattaca
1920
gccattatcc attactgttt gttggatcca actacacagt atcaccaact tttggtcagt
1980
gtagaccaga aacacttggt tgaagcacgc agtggaatcc tctcaatcct tcatatgate
2040
atgtcctctg tgacactget ttggagcata ctgcatcaag ctgattcttc agaaaagatg
2100
actattgccg catccgcatc tcttaccact attaattctg gagctacaaa gaacttgaga
2160
caacagattc ttgaattggt gggccccatt tcaatgaatc atgggtgttc ctttatggct
2220
gccattgcat ttgtgtggaa tgaaagaaga cagaataaaa caaccaccag gaccaaggtc
2280
attcctgcag ccagtgaaga acagctttta ttagtggaat tggttcgttc aatcagtgtc
2340

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 4080
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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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Ile	Leu	Gln	Ser	Ser	Asp	Ser	Gly	Cys	Ser	Gln	Ser	Ser	Ala	Gly	Asp
		20					25						30		
Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
	35					40					45				
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
	50				55						60				
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
65				70					75					80	
Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
			85				90							95	
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
		100					105						110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
	115					120						125			
Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
	130					135					140				
Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
145				150					155						160
His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
			165						170					175	
His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
		180					185						190		
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
	195					200							205		
Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Asp	Lys	Lys	Lys
	210					215					220				
Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

225					230					235				240	
Leu	Asp	Leu	Glu	Asn	Trp	Tyr	Ser	Cys	Gly	Glu	Gly	Asp	Ile	Ser	Glu
				245						250				255	
Ile	Glu	Ser	Asp	Met	Gly	Ser	Pro	Gly	Ser	Arg	Lys	Ser	Pro	Asn	Phe
			260					265					270		
Asn	Ile	His	Pro	Leu	Tyr	Gln	His	Val	Leu	Leu	Tyr	Leu	Gln	Leu	Tyr
			275				280					285			
Asp	Ser	Ser	Arg	Thr	Leu	Tyr	Ala	Phe	Ser	Ala	Ile	Lys	Ala	Ile	Leu
	290					295					300				
Lys	Thr	Asn	Pro	Ile	Ala	Phe	Val	Asn	Ala	Ile	Ser	Thr	Thr	Ser	Val
305					310					315					320
Asn	Asn	Ala	Tyr	Thr	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Asn	Leu	Leu	Ala
			325						330				335		
Arg	His	Arg	Ile	Ser	Val	Met	Gly	Lys	Asp	Phe	Tyr	Ser	His	Ile	Pro
			340					345					350		
Val	Asp	Ser	Asn	His	Asn	Phe	Arg	Ser	Ser	Met	Tyr	Ile	Glu	Ile	Leu
	355						360					365			
Ile	Ser	Leu	Cys	Leu	Tyr	Tyr	Met	Arg	Ser	His	Tyr	Pro	Thr	His	Val
	370					375					380				
Lys	Val	Thr	Ala	Gln	Asp	Leu	Ile	Gly	Asn	Arg	Asn	Met	Gln	Met	Met
385					390					395					400
Ser	Ile	Glu	Ile	Leu	Thr	Leu	Leu	Phe	Thr	Glu	Leu	Ala	Lys	Val	Ile
			405						410				415		
Glu	Ser	Ser	Ala	Lys	Gly	Phe	Pro	Ser	Phe	Ile	Ser	Asp	Met	Leu	Ser
			420					425				430			
Lys	Cys	Lys	Val	Gln	Lys	Val	Ile	Leu	His	Cys	Leu	Leu	Ser	Ser	Ile
	435						440				445				
Phe	Ser	Ala	Gln	Lys	Trp	His	Ser	Glu	Lys	Met	Ala	Gly	Lys	Asn	Leu
	450					455					460				
Val	Ala	Val	Glu	Glu	Gly	Phe	Ser	Glu	Asp	Ser	Leu	Ile	Asn	Phe	Ser
465					470					475					480
Glu	Asp	Glu	Phe	Asp	Asn	Gly	Ser	Thr	Leu	Gln	Ser	Gln	Leu	Leu	Lys
			485						490				495		
Val	Leu	Gln	Arg	Leu	Ile	Val	Leu	Glu	His	Arg	Val	Met	Thr	Ile	Pro
			500					505					510		
Glu	Glu	Asn	Glu	Thr	Gly	Phe	Asp	Phe	Val	Val	Ser	Asp	Leu	Glu	His
		515					520					525			
Ile	Ser	Pro	His	Gln	Pro	Met	Thr	Ser	Leu	Gln	Tyr	Leu	His	Ala	Gln
	530					535					540				
Pro	Ile	Thr	Cys	Gln	Gly	Met	Phe	Leu	Cys	Ala	Val	Ile	Arg	Ala	Leu
545					550					555					560
His	Gln	His	Cys	Ala	Cys	Lys	Met	His	Pro	Gln	Trp	Ile	Gly	Leu	Ile
			565						570				575		
Thr	Ser	Thr	Leu	Pro	Tyr	Met	Gly	Lys	Val	Leu	Gln	Arg	Val	Val	Val
			580					585					590		
Ser	Val	Thr	Leu	Gln	Leu	Cys	Arg	Asn	Leu	Asp	Asn	Leu	Ile	Gln	Gln
	595						600					605			
Tyr	Lys	Tyr	Glu	Thr	Gly	Leu	Ser	Asp	Ser	Arg	Pro	Leu	Trp	Met	Ala
	610					615					620				
Ser	Ile	Ile	Pro	Pro	Asp	Met	Ile	Leu	Thr	Leu	Leu	Glu	Gly	Ile	Thr
625					630					635					640
Ala	Ile	Ile	His	Tyr	Cys	Leu	Leu	Asp	Pro	Thr	Thr	Gln	Tyr	His	Gln
			645						650				655		
Leu	Leu	Val	Ser	Val	Asp	Gln	Lys	His	Leu	Phe	Glu	Ala	Arg	Ser	Gly

660	665	670
Ile Leu Ser Ile Leu His Met	Ile Met Ser Ser Val Thr Leu Leu Trp	
675	680	685
Ser Ile Leu His Gln Ala Asp	Ser Ser Glu Lys Met Thr Ile Ala Ala	
690	695	700
Ser Ala Ser Leu Thr Thr Ile Asn Leu Gly Ala Thr Lys Asn Leu Arg		
705	710	715
Gln Gln Ile Leu Glu Leu Leu Gly Pro Ile Ser Met Asn His Gly Val		
725	730	735
His Phe Met Ala Ala Ile Ala Phe Val Trp Asn Glu Arg Arg Gln Asn		
740	745	750
Lys Thr Thr Thr Arg Thr Lys Val Ile Pro Ala Ala Ser Glu Glu Gln		
755	760	765
Leu Leu Leu Val Glu Leu Val Arg Ser Ile Ser Val Met Arg Ala Glu		
770	775	780
Thr Val Ile Gln Thr Val Lys Glu Val Leu Lys Gln Pro Pro Ala Ile		
785	790	795
Ala Lys Asp Lys Lys His Leu Ser Leu Glu Val Cys Met Leu Gln Phe		
805	810	815
Phe Tyr Ala Tyr Ile Gln Arg Ile Pro Val Pro Asn Leu Val Asp Ser		
820	825	830
Trp Ala Ser Leu Leu Ile Leu Leu Lys Asp Ser Ile Gln Leu Ser Leu		
835	840	845
Pro Ala Pro Gly Gln Phe Leu Ile Leu Gly Val Leu Asn Glu Phe Ile		
850	855	860
Met Lys Asn Pro Ser Leu Glu Asn Lys Lys Asp Gln Arg Asp Leu Gln		
865	870	875
Asp Val Thr His Lys Ile Val Asp Ala Ile Gly Ala Ile Ala Gly Ser		
885	890	895
Ser Leu Glu Gln Thr Thr Trp Leu Arg Arg Asn Leu Glu Val Lys Pro		
900	905	910
Ser Pro Lys Ile Met Val Asp Gly Thr Asn Leu Glu Ser Asp Val Glu		
915	920	925
Asp Met Leu Ser Pro Ala Met Glu Thr Ala Asn Ile Thr Pro Ser Val		
930	935	940
Tyr Ser Val His Ala Leu Thr Leu Leu Ser Glu Val Leu Ala His Leu		
945	950	955
Leu Asp Met Val Phe Tyr Ser Asp Glu Lys Glu Arg Val Ile Pro Leu		
965	970	975
Leu Val Asn Ile Met His Tyr Val Val Pro Tyr Leu Arg Asn His Ser		
980	985	990
Ala His Asn Ala Pro Ser Tyr Arg Ala Cys Val Gln Leu Leu Ser Ser		
995	1000	1005
Leu Ser Gly Tyr Gln Tyr Thr Arg Arg Ala Trp Lys Lys Glu Ala Phe		
1010	1015	1020
Asp Leu Phe Met Asp Pro Ser Phe Phe Gln Met Asp Ala Ser Cys Val		
1025	1030	1035
Asn His Trp Arg Ala Ile Met Asp Asn Leu Met Thr His Asp Lys Thr		
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Thr Phe Arg Asp Leu Met Thr Arg Val Ala Val Ala Gln Ser Ser Ser		
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Leu Asn Leu Phe Ala Asn Arg Asp Val Glu Leu Glu Gln Arg Ala Met		
1075	1080	1085
Leu Leu Lys Arg Leu Ala Phe Ala Ile Phe Ser Ser Glu Ile Asp Gln		

1090 1095 1100
 Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu
 1105 1110 1115 1120
 Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe
 1125 1130 1135
 Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp
 1140 1145 1150
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln
 1155 1160 1165
 Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val
 1170 1175 1180
 Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser
 1185 1190 1195 1200
 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe
 1205 1210 1215
 Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln
 1220 1225 1230
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu
 1235 1240 1245
 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val
 1250 1255 1260
 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu
 1265 1270 1275 1280
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu
 1285 1290 1295
 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe
 1300 1305 1310
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly
 1315 1320 1325
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys
 1330 1335 1340
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln
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 1365 1370 1375
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<210> 1831

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1831

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 120

atcctggagg ctgcaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac
 180

ggcaagctgc gccaatgcaa gatcgggtgat gctgctgcgg tcagctacga caaggcccg
 240

cagaaggcca tgcggttgcg ttggaagggtg gaatgggggg gcaatccatt ggaggagcgc
 300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgccgcac
 360
 atccacctgc accggaggaa ttttcagtcc acgctgagct tctcaagtgc ccatgtcctg
 420
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 480
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 508

<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

Xaa	His	Glu	Arg	Arg	Gly	Arg	Met	Pro	Ile	Val	Lys	Leu	Ser	Ala	Gln
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Phe	Val	Arg	Glu	Ala	Val	Cys	Pro	Pro	Gly	Lys	Ser	Lys	Val	Asp	Tyr
			20				25					30			
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
		35				40					45				
Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
	50					55				60					
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg
65					70					75				80	
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85					90						95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
			100					105					110		
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
	115					120						125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
	130				135					140					
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
145					150					155					160
Gln	Asp	Leu	Arg	Thr	Lys	Gly	Tyr	Ala							
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<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

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 120
 ggcgcaaagc ggcgatgacg gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca
 180
 gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca
 240
 gcggcttggg ctccgcttcc cagcgttccg gcggcgccga gccattttgg aaatcgacga
 300

acatctccgg cgctcctgct gtcaggcgct gaaggatcg aaagtcatgc gccgtgacaa
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 430

<210> 1834

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1834

Met	Arg	Arg	Cys	Arg	Leu	Asn	Cys	Pro	Val	Pro	Arg	Gln	Thr	Met	Pro
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Arg	Arg	Ala	Ala	Ala	Lys	Gly	Arg	Arg	Arg	Ser	Val	Ala	Gln	Ser	Gly
		20					25					30			
Asp	Asp	Arg	Val	Glu	Gln	Arg	Tyr	Ser	Ser	Gln	Arg	Ala	Asn	Gln	Gln
		35				40					45				
His	His	Gln	Val	Glu	Thr	Asp	Asp	Pro	Arg	Arg	Asp	Ala	Phe	Ser	Ala
	50				55					60					
Arg	Val	Trp	Gln	Arg	Leu	Gly	Leu	Gly	Phe	Pro	Ala	Phe	Arg	Arg	Arg
65			70					75					80		
Pro	Ala	Ile	Leu	Glu	Ile	Asp	Glu	His	Leu	Arg	Arg	Ser	Cys	Cys	Gln
		85					90					95			
Ala	Leu	Lys	Val	Ser	Lys	Val	Met	Arg	Arg	Asp	Lys	Gly	Arg	Ser	Ala
		100					105					110			
Thr	Gln	Glu	Pro	Lys	Arg	Arg	Arg	Leu	Gln						
	115						120								

<210> 1835

<211> 677

<212> DNA

<213> Homo sapiens

<400> 1835

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 120
 tctggcccgc cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctccccagac
 180
 gctgcagcac cctcagggtg tcccgccacc ccaggcactg tcccaccctc agagcctcca
 240
 gcagcctcag ggctggggc accctcagcc catggcccaa acccagggtt tgggtccacc
 300
 tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg
 360
 gaagatgcca gactcagatg ccccccgaa tgtgaccgtg tctacctcaa ctatccccct
 420
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca
 480
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca
 540

gacgcgccaac cccagcccca ttagtcgcag tctgctcatc aatgcaagca cccgggtgtc
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 gacccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacacca
 660
 cgcggccacc gccgcgg
 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln
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 His Phe Ser Pro Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro
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 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala
 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
 100 105 110
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
 115 120 125
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
 130 135 140

<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 1837
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 acggctcgata tcaatatcac tgggttttct tcacagtatt taccgcgccc ctatggacca
 120
 attgctgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca
 180
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccc
 240
 accccgatcc agtaaccttc gataacgga aagccggcac cccacataac tcgngtgatc
 300
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaacgg aattatcaag
 360
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actggcttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgagg ttattgcac catttcgagg cgtcaatggc actcatggca
 540
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 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
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 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
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 60
 gaagttcagg caaaggctta tcaggcggcg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttctcg gcaataaaatt ccgcgaagtc catgctgcag cgatgaatgt tctcgctcc
 180
 cgccttgagg actgggggct tatgccggtc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttggat gccgcacggc accagccacc atctagggct ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

50 55 60
 Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
 65 70 75 80
 Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
 85 90 95
 Leu Asp Val His
 100

<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1841
 nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggcccggt
 60
 gtcgatccgg tggtcgagat cggcggtccc ggtacgctag cccaatcgat ggtcgccccg
 120
 cgcgctcggc cccatgtcgc ctgcatcggc gtgcttnacg gggattgtcg ggcggtgagg
 180
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccggtcgg cagccgcgcg
 240
 cagcaactcg cgatgatcgc gggggctcag gcgaacggca tccgtccgat cctcgaccag
 300
 catttccgc tcgaaaatct ccccgacgcg
 330

<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1842
 Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
 1 5 10 15
 Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
 20 25 30
 Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
 35 40 45
 Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
 50 55 60
 Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
 65 70 75 80
 Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
 85 90 95
 Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
 100 105 110

<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
 60
 acagttttga gtccagatta acaccaagca gggtcatgaa agccttaagt tatgcatcat
 120
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttctcag
 180
 tgcgggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
 240
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatattt cagacaaaaa
 300
 acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggaggctctc
 360
 catctggaac tggagggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
 420
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1				5					10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
			20					25					30		
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
		35					40					45			
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50					55					60				
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65				70					75					80	
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85						90					95	
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
		100					105						110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met	
	115					120					125				
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Xaa	Pro		
	130					135						140			

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcac aatgagtgga
 60
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg
 120
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
 180

cgtggctccc agcagtaccg tgetctcact gtccctgagc tgaccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgctgacccg cgtcatggcc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1846

Lys	Leu	Thr	Thr	Pro	Ser	Phe	Gly	Asp	Leu	Asn	His	Leu	Ile	Ser	Ala
1				5				10						15	
Thr	Met	Ser	Gly	Val	Thr	Cys	Cys	Leu	Arg	Phe	Pro	Gly	Gln	Leu	Asn
			20					25					30		
Ser	Asp	Leu	Arg	Lys	Leu	Ala	Val	Asn	Leu	Ile	Pro	Phe	Pro	Arg	Leu
		35				40						45			
His	Phe	Phe	Met	Val	Gly	Phe	Ala	Pro	Leu	Thr	Ser	Arg	Gly	Ser	Gln
	50					55					60				
Gln	Tyr	Arg	Ala	Leu	Thr	Val	Pro	Glu	Leu	Thr	Gln	Gln	Met	Trp	Asp
65				70					75					80	
Ser	Lys	Asn	Met	Met	Cys	Ala	Ala	Asp	Pro	Arg	His	Gly	Arg	Tyr	Leu
			85					90					95		
Thr	Val	Ser	Ala	Met	Phe	Arg	Gly	Lys	Met	Ser	Thr	Lys	Glu	Val	Asp
			100					105					110		
Glu	Gln	Met	Leu	Asn	Val	Gln	Asn	Lys	Asn	Ser	Ser	Tyr	Phe	Val	Glu
		115					120						125		
Trp	Ile														
	130														

<210> 1847

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1847

cagccgtgct ttcctgcgtc aactcgggaa cggtatatc gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtcaa gctggcgacc
 120
 ctggccgcgc ccgcgttggc cgatcacgcc atgttgagc aggccttcca gctgttccag
 180
 caaaaaagtt gcggacaatc tctgcgcgga tggctcgggtg ttcgacttca gggagcgcga
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactagggtt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagtgc tcttgatcca
 240
 tggatgtatc cgggtgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgcc aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

<400> 1852

Xaa	Ile	Gly	Glu	Ala	Phe	Arg	Thr	Gly	Asp	Leu	Asp	Ser	Lys	Pro	Asp
1				5					10					15	
Pro	Ser	Arg	Ser	Phe	Arg	Pro	Tyr	Arg	Ala	Glu	Asp	Asn	Asp	Ser	Tyr
			20					25					30		
Ala	Ser	Glu	Ile	Lys	Glu	Leu	Gln	Leu	Val	Leu	Ala	Glu	Ala	His	Asp
		35					40					45			
Ser	Leu	Arg	Gly	Leu	Gln	Glu	Gln	Leu	Ser	Gln	Glu	Arg	Gln	Leu	Arg
	50					55					60				
Lys	Glu	Glu	Ala	Asp	Asn	Phe	Asn	Gln	Lys	Met	Val	Gln	Leu	Lys	Glu
65					70					75					80
Asp	Gln	Gln	Arg	Ala	Leu	Leu	Arg	Arg	Glu	Phe	Glu	Leu	Gln	Ser	Leu

```

      85              90              95
Ser Leu Gln Arg Arg Leu Glu Gln Lys Phe Trp Ser Gln Glu Lys Asn
      100              105              110
Met Leu Val Gln Glu Ser Gln Gln Phe Lys His Asn Phe Leu Leu Leu
      115              120              125
Phe Met Lys Leu Arg Trp Phe Leu Lys Arg Trp Arg Gln Gly Lys Val
      130              135              140
Leu Pro Ser Glu Gly Asp Asp Phe Leu Glu Val Asn Ser Met Lys Asp
145              150              155              160
Leu Tyr Leu Leu Met Glu Glu Asp Glu Ile Asn Ala Gln His Ser Asp
      165              170              175
Asn Lys Ala Cys Thr Gly Asp Ser Trp Thr Gln Asn Thr Pro Asn
      180              185              190

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<210> 1853

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1853

```

gccggcgccg accaagccac ggcattgcccc accacattg gaagaggtgt cgttcgccca
60
cgctcattgag gaggcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcattggcacc ttctgcgcac ctcgcaccac atggatggca aggtcggcac
180
gacgttttac ctggatgacg atgtcatttt tgctcgccca cagaagcagc gctcagccga
240
gggccagcga ctgaatacag agcccgtctc ttggccgag ttgctcgagc gcgctgctgc
300
atagaataca tatacccaag ctatgatgat gccgtcgt
338

```

<210> 1854

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1854

```

Met Pro His Pro Pro Trp Lys Arg Cys Arg Ser Ala Thr Ser Leu Arg
 1      5      10      15
Ser Ala Pro Ser Lys Leu Thr Cys Ser Ser Ala Arg Ser Ile His Ser
      20      25      30
Ser Leu Arg Arg Ala Trp His Phe Cys Ala Ser Arg Thr Thr Trp Met
      35      40      45
Ala Arg Ser Ala Arg Arg Phe Thr Trp Met Thr Met Ser Phe Leu Ser
      50      55      60
Arg His Arg Ser Ser Ala Gln Pro Arg Ala Ser Asp Ser Asn Thr Ser
65      70      75      80
Pro Ser Leu Trp Pro Ser Cys Ser Ser Ala Leu Leu His Arg Ile His
      85      90      95
Ile Pro Lys Leu
      100

```

<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
 60
 ccgagcgaaa cgaggaaaat cgtggcgcac gtcctggacc tggacaacca cgaggtcacg
 120
 gtgcagtgtc tgcgcattgg cggtggcttt ggcggtaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgacctg accgggcgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccgaaaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagcctgg acctctcgga gccgggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgccctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcagcatc atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccacca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgcgag gagcagccac catcgcccg ccatgctgcg gcactcgata ccaatacgtt
 240
 gcgcttcaac caatcgatct tggtcgaggc atgccgccca tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5				10					15		
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
				20				25					30		
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
				35				40					45		
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
				50				55				60			
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
				65				70				75			80
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
				85				90						95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
				100											

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgtaac caacttcctc tacttcgca agatggattt ggattttctg
 60
 ttccacatgt tttttctgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattgtt
 180
 ctgateggag ggatgatacc ttacatttcc gagacatttg ccagaattct gtctctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg
 300
 agcaatctgg gcctgttcac ctttacgggt gcatacttac catgg
 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggctg tagaaaagcc
 60
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggttttatt ccattgcttat
 420
 cgtttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

1	5	10	15
Val Arg Lys	Ala Asn Ser Glu Leu	His Ser Val Gly Leu	Gly Val Met
	20	25	30
Asn Leu His	Gly Tyr Leu Ala Lys	Asn Lys Ile Gly Tyr	Glu Ser Glu
	35	40	45
Glu Ala Lys	Asp Phe Ala Asn Ile	Phe Phe Met Met Met	Asn Tyr Tyr
	50	55	60
Ser Leu Glu	Arg Ser Met Gln Ile	Ala Lys Glu Arg Gln	Glu Thr Phe
65	70	75	80
Lys Asp Phe	Asp Lys Ser Asp Tyr	Ala Asn Gly Lys Tyr	Phe Glu Phe
	85	90	95
Tyr Thr Ser	Gln Ser Phe Glu Pro	Lys Tyr Glu Lys Val	Arg Lys Leu
	100	105	110
Phe Asp Gly	Leu Glu Ile Pro Thr	Pro Glu Asp Trp Lys	Ala Leu Gln
	115	120	125
Lys Glu Val	Glu Thr His Gly Leu	Phe His Ala Tyr Arg	Leu Ala Ile
	130	135	140
Ala			
145			

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

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nggacccctca cgccccccat catacgtggg atacgttga gcaaagcgt catgacggg
60
tctccgtcgt gctcactacc cacaacatgg atgaggtcga acggtcggct gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttggga agatgtgttc ctactcaca ctagtgaacc cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcaact caggccgcac cggctgctgc acgctgctgc
300
aaccacgtc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcatte ccacggtgat catcgtcgcc gggcgcttcc tggcgggccg ggtcggactg
420
acgatggacg tcttagcacc ctacgtgctg gcgctcgcca tctggtcgac atgtttcact
480
tccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgtag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgtcatcacc tctttagcgc tgggctggca ccccccagg
660
tccggcctgg cctggctccc aaccctggtg agcgttgtgc tcgcatgat gacattcggg
720
ctgcagcac tggcaatggc cggcgtggc aaagctgaag tcactctcgg actggccaac
780
ttggtatata tc
792

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<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Val Thr Ala Gln Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc
 60
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaaggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcgggc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccgggctg
 360
 ggcatgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct
 480
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc cctcaggtt
 540
 caagcacagc ttttgcagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc
 600
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacgtt tacaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly	
		35				40					45				
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
		50			55						60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65				70					75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
		100					105					110			
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
		115				120					125				
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
		130			135					140					
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145				150					155					160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165				170						175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
		180					185					190			
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
		195				200					205				
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210				215						220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1867

nnggggcacg gttagggcca gtgggcagag gggtagggga tatgcaggac cttccactgt
 60
 tccatgcatg ggacggcact tgggtccgag atcaggtagc caggcatgga aggaacatgg
 120
 gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
 180
 tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttggtg cccggagagg
 240
 ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccgag tccgagccca
 300
 cctctctgctg ctcacccct tccaccnng cagcccccgc ctctcccgca gaactctccc
 360
 caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
 420
 gcgaggtgct ttgcaccccc aagtgatcat gttcccgctg ccagcctgcc aaggatgatg
 480
 ggagcttggg gagcgggggc tggcagggtt tttccgga
 518

<210> 1868

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1868

Gln	Asp	Arg	Pro	Ser	Gly	Trp	Leu	Ala	Leu	Leu	Pro	Asn	Asn	Val	Val
1				5					10					15	
Ala	Lys	Ala	Leu	Cys	Pro	Glu	Arg	Phe	Leu	Gly	Ala	Ser	Arg	Gly	Leu
			20					25					30		
His	Arg	Thr	Trp	Val	Gly	Thr	Pro	Ala	Pro	Ser	Pro	Pro	Leu	Leu	Pro
		35					40				45				
Pro	Pro	Leu	Pro	Pro	Xaa	Gln	Pro	Pro	Pro	Leu	Pro	Gln	Asn	Ser	Pro
	50					55					60				
Gln	Ala	Arg	Pro	Pro	Gly	Pro	Ala	Ala							
65					70										

<210> 1869

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1869

acgcgtcacc ttctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga
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 ccgtgacatg ccgagcaccg aaaccacact gtggattcgc gagctgagcc gcacgcaccg
 120

cgacgtgtcg actgccaccc actttcggtg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgcc a gcggtctact gccgtcggtg
 240
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcatc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc
 360
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgctgggt
 420
 cgacaccgtc aacagg
 436

<210> 1870
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1870
 Met Pro Ser Thr Glu Thr His Leu Trp Ile Arg Glu Leu Ser Arg Ile
 1 5 10 15
 Asp Arg Asp Val Ser Thr Ala Thr His Phe Arg Trp Ser Asp Asp Gly
 20 25 30
 Thr Val Leu Gly Gln Thr Thr Asp Asp Gly Thr Glu Pro Glu Val Val
 35 40 45
 Ala Leu Pro Ala Val Tyr Cys Arg Arg Cys Gly Arg Ser Gly Trp Gly
 50 55 60
 Val Gln Leu Ala Ser Thr Gly Asn Asn Leu Ser Glu Asn Asn Asp Ser
 65 70 75 80
 Ile Arg Arg Thr His Ala Ala His Asp Gly Arg Phe Arg Ala Leu Leu
 85 90 95
 Ser Ala Pro Arg Glu Gly Ala Ser Ala Val Asp Thr Gly Glu Ala Thr
 100 105 110
 Leu Ser Leu Arg Trp Phe Asp Thr Val Asn Arg
 115 120

<210> 1871
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1871
 nntgcagcgc cccgaggctg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtgcac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa
 180
 tcaggtattc cggactttcg ctcggttggc gggctttaca ccaactcagca tgacctgcc
 240
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc
 300
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg
 360

ttggttgccct tggagcaggc tggggaactt tcgacgatca ttacccagaa tattgacggc
 420
 ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggt gcac
 474

<210> 1872

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1872

Met	Thr	Gly	Glu	Gln	Leu	Ala	His	Trp	Ile	Glu	Glu	Ser	Thr	Ser	Thr
1			5						10					15	
Val	Phe	Phe	Gly	Ala	Gly	Met	Ser	Thr	Glu	Ser	Gly	Ile	Pro	Asp	
			20				25					30			
Phe	Arg	Ser	Ala	Gly	Gly	Leu	Tyr	Thr	Thr	Gln	His	Asp	Leu	Pro	Phe
		35					40					45			
Pro	Ala	Glu	Tyr	Met	Leu	Ser	His	Ser	Cys	Leu	Val	Glu	His	Pro	Ala
		50				55					60				
Glu	Phe	Phe	Asp	Phe	Tyr	Arg	Thr	Tyr	Leu	Ile	His	Pro	Gln	Ala	Arg
65					70				75					80	
Pro	Asn	Ala	Gly	His	Arg	Ala	Leu	Val	Ala	Leu	Glu	Gln	Ala	Gly	Glu
			85						90					95	
Leu	Ser	Thr	Ile	Ile	Thr	Gln	Asn	Ile	Asp	Gly	Leu	His	Gln	Glu	Ala
			100					105						110	
Gly	Ser	Arg	Gln	Val	Ile	Glu	Leu	His	Gly	Ser	Val	His			
			115					120						125	

<210> 1873

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1873

nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg
 60
 gggtccctcg gggatctcgg aggggagacc cccacccggg aggactggag gcagcgccctc
 120
 tccgcgcccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
 180
 ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgcccagt gggagcgaag
 240
 ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa atttttagtat
 300
 gcatatgagt caccaggaaa gttttttgaa acaaattt
 338

<210> 1874

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1874

Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1875

```

aagcttggcg tacaagtggg tcgtcgtttc tcaggtgggt gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttcg tgattttgga
120
aaattcacag aaccctgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaatth tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

<210> 1876

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1876

```

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```


115

120

<210> 1877

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1877

acgcgtgagt ggctcgcaaat atgacgggca agaaacgctt agaaagaaac taccattaa
 60
 cgaggttatg caaattgcag aaatctctct atcggattgt ggctatatta ttccatcttt
 120
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
 180
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc
 240
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccg
 300
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
 357

<210> 1878

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1878

Met	Gln	Ile	Ala	Glu	Ile	Ser	Leu	Ser	Asp	Cys	Gly	Tyr	Ile	Ile	Ser
1				5					10					15	
Ser	Phe	Gln	Ala	Gly	Pro	Arg	Ala	Val	Gly	Leu	Gln	Arg	Pro	Ile	
		20				25				30					
Ile	Ser	Glu	His	Phe	Phe	Gln	Phe	Asp	Pro	Phe	Asp	Lys	Arg	His	Trp
		35				40				45					
Val	Val	Ser	His	His	Leu	Pro	His	Ala	Ala	Thr	Ala	Ala	Phe	Thr	Ser
		50				55				60					
Gly	Phe	Glu	Asp	Cys	Ala	Gly	Leu	Val	Ser	Asp	Thr	Ala	Gly	Ser	Asn
65				70					75					80	
Thr	Leu	Asp	Gly	Lys	Asp	Tyr	Val	Glu	Ser	Cys	Cys	Asn	Ala	Ile	Pro
			85					90						95	

<210> 1879

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 1879

nacgcgtgga tgctccttgg acggcttttt cgtggtagag ggttcccggg gcgcgcgcga
 60
 tcctctggga gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctctcct
 120
 gtccctccca caggctctga cgcccgtctt gcggcttcgg tgtttgaaca ggccacagtc
 180
 caggagcgt tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtgga taagttgaag gaggcctga aaccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaaacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gccccgcaga aagtgtttt cccacggag cgactgtctc tgagggtggga gcgggtcttc
 660
 cgcgtgggag caggactcca caacctggc aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgtctt ccaaggagca tgctcgagc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcattgaga accacattgt ccaggccttc
 840
 gccaacagcg gcaacgccat caagcccgtc tccttcattc gagacctgaa aaagatcgcc
 900
 cgacattcc gctttgggaa ccaggaggac gcgcatgagt tctgcggtta caccatcgac
 960
 gccatgcaga aagcctgect gaatggctgt gccaaagtgg atcgtcaaac gcaggctact
 1020
 accttggtcc atcaaatttt tggagggtat ctcagatcac gc
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10						15	
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35					40					45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50					55					60				
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65					70					75				80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90					95		
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100					105					110			
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
	115					120					125				
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130				135						140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

145 150 155 160
 Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
 165 170 175
 Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
 180 185 190
 Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
 195 200 205
 Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
 210 215 220
 Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
 225 230 235 240
 Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
 245 250

<210> 1881

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1881

natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
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 aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
 120
 tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggtaagca
 180
 cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
 240
 ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
 300
 atagggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
 358

<210> 1882

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1882

Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
 1 5 10 15
 Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
 20 25 30
 Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
 35 40 45
 Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
 50 55 60
 Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
 65 70 75 80
 Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
 85 90 95
 Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
 100 105 110
 Ile Arg Arg

115

<210> 1883

<211> 367

<212> DNA

<213> Homo sapiens

<400> 1883

ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttgget gctcagactt
 60
 gggtggggag aatgatacta agacaccaga catcacatcc attgctccca ttccactat
 120
 tgctgaaggc gatgagtctg tatttgtaa ctccaattca aacagctcga tggcgctcc
 180
 tgcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
 240
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga acctgatgg
 300
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg
 360
 cgatttn
 367

<210> 1884

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1884

Met	Asn	Leu	His	Ser	Asp	Gln	Gly	Ser	Asn	Ser	Leu	Gly	Cys	Ser	Asp
1				5				10					15		
Leu	Gly	Trp	Glu	Asn	Asp	Thr	Lys	Thr	Pro	Asp	Ile	Thr	Ser	Ile	Ala
			20					25					30		
Pro	Ile	Pro	Thr	Ile	Ala	Glu	Gly	Asp	Glu	Ser	Val	Phe	Val	Asn	Ser
			35					40					45		
Asn	Ser	Asn	Ser	Ser	Met	Val	Pro	Pro	Val	Leu	Glu	Asn	Asn	Ala	Val
			50					55				60			
Asp	Leu	Thr	Asp	Gly	Leu	Thr	Asp	Leu	Glu	Ser	Tyr	Met	Arg	Phe	Leu
65					70					75					80
Met	Asp	Gly	Gly	Ala	Ser	Asp	Ser	Ile	Asp	Ser	Leu	Leu	Asn	Leu	Asp
					85				90					95	
Gly	Ser	Gln	Asp	Leu	Gly	Ser	Asn	Met	Asp	Leu	Trp	Thr	Phe	Asp	Asp
			100					105						110	
Met	Pro	Ile	Ala	Gly	Asp	Xaa									
															115

<210> 1885

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1885

nacgcgtatt cgcaaagaat gtctttgagg cacagagaca gtcgtcgtcc tcgacaccat
 60

gttcgacgat ctcggcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg
 120
 ctgcgtagta cagctgctgt tgccgcggg gccgcgaccg gtaccgggtt ccaaccactg
 180
 aactgggtgga tcctcgtcat tcccggcttc gctgcgctca tcctgctggt gcgcaacgcc
 240
 actggtcggg ccgcggcagg actgggggat ctcttcggca tcggctctgt taccaccacc
 300
 atttctggg taggcgtcat cgcccgccg gtggcgatac ttctcatcgc tgtcatggcg
 360
 ttgtggtgtc tgctggccgg gtggacgatt cg
 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

Xaa	Ala	Tyr	Ser	Gln	Arg	Met	Ser	Leu	Arg	His	Arg	Asp	Ser	Arg	Arg
1				5					10					15	
Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
		20						25					30		
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
		35					40					45			
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50					55					60				
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65					70					75				80	
Thr	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu
			85						90					95	
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100						105					110	
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
		115					120							125	
Thr	Ile														
															130

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

cgcgagttca ttccgacctt tgaggacgtt gccaaagcgtc tcaatgggga ccagccgatc
 60
 gacttcttgg tgcaggaac tttatatccc gatgtcgtcg agtctggtgg cggtgagggc
 120
 gctgccaaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt
 180
 ctcggtgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
 240
 ggtctgcccg aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc
 300

attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
 360
 cgt
 363

<210> 1888

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1888

Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly
 1 5 10 15
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val
 20 25 30
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889

<211> 530

<212> DNA

<213> Homo sapiens

<400> 1889

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 60
 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacgggtt ttcgaccctc
 120
 acagcgctct tcggtgatcg tatcgacatg gggctgggcc gggctcccgg cggtgacatg
 180
 ctctccgccc atgccctcaa tcaggggcag gtcattccgc ctgagggcat taattccctc
 240
 atcgccgaaa cggtaggggt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag
 300
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
 360
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgccca gtttttcacc
 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggttcccc
 480
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga
 530

<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890

Ala	Pro	Asp	Leu	Leu	Met	Ala	Arg	Ile	Ala	Thr	Ala	Thr	Gln	Ser	Ile
1				5					10					15	
Arg	Leu	Gly	Ser	Gly	Gly	Val	Met	Ala	Met	His	Tyr	Gly	Ser	Leu	Gln
		20						25					30		
Ile	Ala	Glu	Arg	Phe	Ser	Thr	Leu	Thr	Ala	Leu	Phe	Gly	Asp	Arg	Ile
	35					40						45			
Asp	Met	Gly	Leu	Gly	Arg	Ala	Pro	Gly	Gly	Asp	Met	Leu	Ser	Ala	His
50					55					60					
Ala	Leu	Asn	Gln	Gly	Gln	Val	Ile	Arg	Pro	Glu	Ala	Ile	Asn	Ser	Leu
65			70						75					80	
Ile	Ala	Glu	Thr	Val	Gly	Phe	Val	Arg	Glu	Met	Leu	Pro	Ser	Lys	His
		85						90					95		
Pro	Tyr	Ala	Lys	Val	Val	Val	Thr	Pro	Ala	Gly	Gln	Ile	Gln	Pro	Gln
		100					105						110		
Thr	Trp	Leu	Leu	Gly	Ser	Ser	Gly	Gln	Ser	Ala	Ala	Trp	Ala	Gly	Glu
	115					120						125			
Gln	Gly	Met	Asp	Tyr	Ala	Tyr	Ala	Gln	Phe	Phe	Thr	Gly	Arg	Gln	Asp
130					135						140				
Thr	Gly	Ile	Met	Asp	His	Tyr	Arg	Ala	His	Leu	Ser	Asp	Gly	Phe	Pro
145				150				155						160	
Gly	Arg	Thr	Leu	Ser	Ala	Val	Cys	Val	Ser	Ala	Ala	Pro	Thr	Arg	Pro
			165					170						175	

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891

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 120
 cgtcaattta cagaggcagc ccagcttctt atcaactttc tggcctggct taacggtgta
 180
 atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccgccctc ctccactctg
 240
 ggattttgta ccggtatggg gaggcactac ggttgacagat ttagcttttc agcgtggata
 300
 caagcaccca agtgccccag accacagcag aaaccgtgtt gctgccgttt ccaacctgct
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 420
 tgc
 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
          20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
          35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
          50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
          65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
          85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
          100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
          115          120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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accggtggtg ctgaaccggc ccgagttgcc cttcctagcc ggatatacgt cgagggacgt
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catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcgtt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tggtaggtat agcgagtatg tcatgattac cggtcacgcg
300
tttattgaca tctggcaggc catcaaact caacgaattg gccgtcaaga atggcctgag
360
gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
acccaagctg acgtcggtaa ggctggcag gccatgctgg cactgagtcg cgactggcac
480
gatttagacc cccgctttaa cactggagatg gagaaactta tcgatttcgt cactcgtgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatcgg ggatgtgagt gccagggtta tcgatecccc gttccggacc ctccacgate
660
atcaaatacca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgcgtgggg gaggaatcag
780
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840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

Thr	Gly	Gly	Ala	Glu	Pro	Ala	Arg	Val	Ala	Leu	Pro	Ser	Arg	Ile	Tyr
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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp	
			35				40					45			
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
			50			55					60				
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
			65			70				75				80	
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
			85					90					95		
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
			115				120					125			
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
			130			135					140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
			145			150				155				160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
			165					170					175		
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
			180					185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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120
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180
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240
taccctcaag tggatggcag aggtctctgt tgaaagtggg caatttgcaa tctttgcatt
300
aggatttcag atgcatgccg ggtttccact gattgccaga actcgagatc actacacatg
360
gatcccaaaa atcaacatgg cagtggcagt tcgttagttg tgatccagca gccttctttg
420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta
480
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtggtgaaa
540
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600
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660
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780
accagaccag tccctgggtca taggtctgaa agggcaatcc ggaccagcc caagcaactg
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gaacagtgtg ggaagtgtca gtgtggagaa tgcactgctc ccaggacctt accatcctgt
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1080
tcagataatc cttgctcctg ttcacaatca cactgctgct ctagatacct gtgtatggga
1140
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1200
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1260
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1320
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1380
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1560
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1620
gtacatgaac atacaccac atccagacta cagtgtttta gagttgtttt gattgggtac
1680
cgtgggagca gggaaattgg ttttttaaaa agcaactgtt taattgttta aataagctat
1740
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1800
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1860
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1920
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1980
tattggttgg accttgccca tcttcaactc agccttcgta tttgtgaagg actcagccac
2040

cttcttctt caccceatgc ttctcaccaa atttttgttg tcattgaggg cacttggata
 2100
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 2160
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 2220
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 2280
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 2340
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 2400
 ctgttgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataagg
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 2555

<210> 1896

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1896

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Thr	Leu	Pro	Ser	Cys	Leu	Ala	Cys	Asn	Arg	Gln	Cys	Leu	Cys	Ser	Ala
			20					25					30		
Glu	Ser	Met	Val	Glu	Tyr	Gly	Thr	Cys	Met	Cys	Leu	Val	Lys	Gly	Ile
		35					40					45			
Phe	Tyr	His	Cys	Ser	Asn	Asp	Asp	Glu	Gly	Asp	Ser	Tyr	Ser	Asp	Asn
50					55					60					
Pro	Cys	Ser	Cys	Ser	Gln	Ser	His	Cys	Cys	Ser	Arg	Tyr	Leu	Cys	Met
65					70					75				80	
Gly	Ala	Met	Ser	Leu	Phe	Leu	Pro	Cys	Leu	Leu	Cys	Tyr	Pro	Pro	Ala
			85						90					95	
Lys	Gly	Cys	Leu	Lys	Leu	Cys	Arg	Arg	Cys	Tyr	Asp	Trp	Ile	His	Arg
			100					105					110		
Pro	Gly	Cys	Arg	Cys	Lys	Asn	Ser	Asn	Thr	Val	Tyr	Cys	Lys	Leu	Glu
			115					120					125		
Ser	Cys	Pro	Ser	Arg	Gly	Gln	Gly	Lys	Pro	Ser					
130							135								

<210> 1897

<211> 938

<212> DNA

<213> Homo sapiens

<400> 1897

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 120

cacgcttcct cctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgtgt
 180
 ctggagtgtg gccgggcctt caccgagcgc tcggcgtga cttegacact gcgcgtccac
 240
 accggcgaga aaccctatgg ctgcgccgac tgtggccgcc gcttcagcca gagctctgcc
 300
 ctctaccagc accggcgct gcacagcggc gagaccccct tccctgccc ggactgtggc
 360
 cgcgccttcg cctacccctc ggacctgcgg cgccacgtgc gcacccacac gggcgagaag
 420
 ccctaccctt gccagactg tgggcgcgc ttttctcct cctccctgct ggtcagtcac
 480
 cggcgggcac actccggcga gtgccctat gttgtgacc agtgtggcaa acgtttctcc
 540
 cagcgcaaga acctctccca gcaccaggtc atccatacag gggagaagcc ctatcactgc
 600
 cctgactgtg gtcgtgctt ccggaggagc cggtccttgg ccaatcaccg gaccacacac
 660
 acaggtgaaa aacccaccca gtgccctagc tgtggacgtc gcttcgcta cccctccctg
 720
 ctggccagcc accggcgct gcactcgggc gagcggccct atgcctgca cctttgctcc
 780
 aagcgttttg ctcaagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag
 840
 cctttccctt gcctcgagt tggccgggct tccgccagag gtggtctctg gctgtccaca
 900
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 938

<210> 1898

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1898

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Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
	20							25				30			
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
	35						40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
	50				55						60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
	65			70					75					80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
		100						105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
	130					135					140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

145 150 155 160
 Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
 165 170 175
 Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
 180 185 190
 Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
 195 200 205
 Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
 210 215 220
 Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
 225 230 235 240
 Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
 245 250 255
 Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
 260 265 270
 Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
 275 280 285
 Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
 290 295 300
 Arg Pro Gln Thr Val Ala Leu Asp
 305 310

<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

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 120
 gaggaatat caggccggct gcggaggga ctgggcaaaa gggacaggaa ccgggggag
 180
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 240
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 360
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 gatgtgtcgg tgacctcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
 480
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 508

<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
65           70           75

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<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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cgggtgttcgg cgatgcgaag gcaacccgcg cttccaagtt cgacccgttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcacccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
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453

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<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

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Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

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115 120 125
 Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys
 130 135 140
 Glu Ile Leu Ile Glu Gly Gly
 145 150

<210> 1903
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1903
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 120
 atttgtgcc aaccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
 180
 ctgctggggg attgctggtt cctgtgtgcc tgcgcgcgc tgcagaagag caggcacctc
 240
 ctggaccagg tcattcctgc gggacagccg agctgggccc accaggagta ccggggctcc
 300
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc
 360
 cctgtgggc ggggcaggtg gcgatgccc tggtagacct gaccggcggc ctggcagaaa
 420
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
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 531

<210> 1904
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1904
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 20 25 30
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
 35 40 45
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp
 50 55 60
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
 65 70 75 80
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
 85 90 95
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
 100 105 110
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg
 115 120 125
 Met Pro Trp Trp Thr

130

<210> 1905

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1905

acgcgtgggc tgateggcat gctctgggca ctgggggtgg tggcggaagt gctgatgttc
 60
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 120
 ctcttgcccg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcggtgctg
 180
 ttgttcgccc aggtgctgca cgcggcgacc ttgcccagct ttcacgcctc tgccattcat
 240
 ttcgtgcaac gtagcttcgg cgcgcgcncg gcaaggccag ggcaggcgtt atacgtgca
 300
 ctggccggta cgggcggggc ttgggcgcg ttgtacccg gttatagctg gaacagcctg
 360
 gggccgacct ggactttcag catcggt
 387

<210> 1906

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1906

Thr	Arg	Gly	Leu	Ile	Gly	Met	Leu	Trp	Ala	Leu	Gly	Val	Val	Ala	Glu
1			5					10					15		
Val	Leu	Met	Phe	Leu	Ala	Met	Ser	Arg	Ile	Leu	Ala	Arg	Phe	Ser	Val
		20					25					30			
Arg	Arg	Val	Leu	Leu	Ala	Ser	Phe	Leu	Leu	Ala	Ala	Val	Arg	Trp	Leu
		35				40						45			
Leu	Leu	Gly	Ala	Leu	Ala	Asp	His	Leu	Ala	Val	Leu	Leu	Phe	Ala	Gln
		50				55				60					
Val	Leu	His	Ala	Ala	Thr	Phe	Ala	Ser	Phe	His	Ala	Ser	Ala	Ile	His
65					70					75				80	
Phe	Val	Gln	Arg	Ser	Phe	Gly	Ala	Arg	Xaa	Ala	Arg	Pro	Gly	Gln	Ala
		85						90					95		
Leu	Tyr	Ala	Ala	Leu	Ala	Gly	Thr	Gly	Gly	Ala	Leu	Gly	Ala	Leu	Tyr
		100						105					110		
Ala	Gly	Tyr	Ser	Trp	Asn	Ser	Leu	Gly	Pro	Thr	Trp	Thr	Phe	Ser	Ile
		115					120					125			
Val															

<210> 1907

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1907

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120
ggcggcgaca cgtcgaaggc cacgttcttg acgggcctgc gcccgatgac gccggacggc
180
acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg
240
ctcggctgga caatggtgtg cggctcgggc caactgctcg ccgacctgat ctcgggcaag
300
atgcccgcga tccaggccga cgacctgtct nnc
333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
1				5					10					15	
Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55					60				
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65				70						75				80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85					90					95		
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105					110		

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

ngactgccgg tcgttcggac gtcttgcttg tcgcgtggag gagaggccg ggctctccag
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gaagggtgct gcggcgacaa aatgaagata ttcgtgggca acgtcgacgg ggcggatacg
120
actcggagg agctggcagc cctctttgcg ccctacggca cggatcatgag ctgcgcgctc
180
atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa
240
gccctgcacg gccacgagct gcggccgggg cgcgcgctcg tggaggaaat gtcgcgccc
300
aggcctctta atacttgga gattttcgtg ggcaatgtgt cggctgcatg cagagccag
360
gaactgcgca gcctcttcga gcgcgcgga cgcgcatcg agtgtgacgt ggtgaaagac
420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac
480
ggcaaagaag tgaagggcaa gcgcatcaac gtggaactct ccaccaaggg tcagaagaag
540
gggcctggcc tggctgtcca gtctggggac aagaccaaga aaccaggggc tggggatacg
600
gccttccctg gaactggtgg cttctctgcc accttcgact accagcaggc ttttggcaac
660
agcactggtg gctttgatgg gcaagcccg t cagcccacac cacccttctt tggctcgcgac
720
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780
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840
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1080
cagggttctt ccttgcctc ctatggtaac cagccatcct cttacggcgc ccaggctgcc
1140
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1200
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1260
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1320
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1380
gcacagccag ccacagctgc tgcctatgcc agccagccag cagcctacgc cgcacaagcc
1440
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1500
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1560
gccactggct cctatggtgc cgcagcagcc tacggggccc aaccttctgc cactctggca
1620
gtccttacc gcactcagtc atcagcctca ttggctgctt cctatgctgc ccagcagcat
1680
ccccaggctg ctgcctcta ccgcggccag ccaggcaatg cctacgatgg ggcaggctag
1740
ccgtctgcag cctacctgtc catgtcccag ggggcccgtt ccaacgccaa cagcaccctg
1800
ccgccctatg agcgtacctg cctctcccca ccccgggcca gctacgacga tccctacaaa
1860
aaggctgtcg ccatgtcgaa aaggatggt tccgaccggc gtttagccga gctctctgat
1920
taccgcggt tatcagagtc gcagctttcg ttccgcgct cgcgcacaaa gtctcgtg
1980
gattaccgtc gcctgccga tgcctattcc gattacgcac gctattcggg ctctataat
2040

gattacctgc gggcggtca gatgcactct ggctaccagc gccgcagtga gggccatcct
 2100
 gggatggggc accacagga gggagggaga aaagaggtgg gtagggttac agatccaggt
 2160
 tataactact ctggcccata ctttctctgg ttgtggtttt tcatgccctc taccatgtgg
 2220
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 2280
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 2400
 tgtgcgcat atttaaggtc gtctggatgg ggaagcaacc tgcagctgag gtcgccggcg
 2460
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 2520
 gccaaagtgt gccagcagtc cagggtaccc tgactgtccc tctgtagact gttgagactg
 2580
 agttcctggt gggacagtca gttggtatgt atccaagtcc ctgctgacca ctaatgttct
 2640
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 2700
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 2760
 tggaaaa
 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
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Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
		20						25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65				70						75				80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90				95		
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100					105						110		
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
		115					120					125			
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130					135					140				
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145				150						155				160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

1460

595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
625	630	635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		
645	650	655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		
660	665	

<210> 1911
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1911
 ncggggtggc cggaatctac tctagtgtc cagcttccct cctcttctgt ctttccctcg
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 ggtgcgcgga tgcgtttgcg cccctgctg cgttccgacg gtcattgagtg gcggcgtcag
 120
 cgcattgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtggggc
 180
 gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgac cgccgcgcgt
 240
 gaagcactgg tgggtccgct cgtcattgag gtggagggga aattcgcagg gcaggttaacc
 300
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
 339

<210> 1912
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1912
Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
1 5 10 15
Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
20 25 30
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
35 40 45
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
50 55 60
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
65 70 75 80
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
85 90 95
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
100 105 110
Trp

<210> 1913
 <211> 767

<212> DNA

<213> Homo sapiens

<400> 1913

gtgcacaccg gttcacagcg atatttcagg caaattgaaa gcgtcagttc gataggctga
60
atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca
120
gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcca tctcatcggc
180
cagagggttg gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
240
tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcctggcgt gaactggtec
300
tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg
360
cagaattgcg tcgcagccac ccggaccttg ccatcaaggt ggcccgcgcc accggaccag
420
caccggtcct cctcaacctc gtcgatacgc gattgctctt ggcagctcat cgcgtccatg
480
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
540
caatgctgtc caggctgacc cggtgtgggt cccagcacca ccaccttcg gtccgcatcg
600
ccaccaatcg tgggtggggt actgcggctg agggaggtcgt cgcgcgctg cgacaggagg
660
ggcgccgtca tatcgagtg ggaagcctgt ggatttgca cgacgagaat ttccgcattc
720
atactcgcca ggctttgcat gccgggtgcc aggttgctgc cgcaccg
767

<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

Met	Ser	His	Leu	His	Pro	His	Ile	Glu	Ser	Thr	Val	Ser	Phe	Val	Pro
1			5					10					15		
Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
		20						25					30		
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
		35				40						45			
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
		50				55					60				
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65					70					75				80	
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
			85					90					95		
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
			100					105					110		
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
			115				120						125		
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val

130	135	140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala		
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr		160
	165	170
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro		175
180	185	190

<210> 1915

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1915

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acgcgtccca ggccccacag gccccctctg gctctcaggc cccccgccca gtggccagga
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aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
120
ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
180
tggcacacac ggetcagggc gaggcactgc cccatggggc tgcattgatcc acgtcacag
240
gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccaccca gaacacatgg
300
agaagccaca gcacaacctc agcgccccgc atgcaggacc ctgggtctca cccattgcac
360
ccaccgtgcg ggacccttgc gctcaccgcg gaacatccac agtgtgggac tgctgcgtct
420
caccacttgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg
480
atccctgagt ctacccgcgc gcaccgcgcg tacctgccgc atccgccatg cgggaccctt
540
gcgtctcacc caccgcaccc gccgtgcggg a
571

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<210> 1916

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1916

Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg		
1	5	10
Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His		15
	20	25
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu		30
	35	40
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys		45
	50	55
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu		60
65	70	75
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro		80
	85	90
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His		95

100
Pro Pro His Pro Pro Cys Gly
115

105

110

<210> 1917
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1917
nnacgcgtga cggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc
60
gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt
120
catccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg
180
gatttcgccg ccggatggtt gtcgcaccgc ttggcagttc ccgtacatcg cacagtggcc
240
gactcccca ggagacactt cccggtgact catttgcagt tcaatcgga gacaaccac
300
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgccggaa
360

<210> 1918
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1918
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
1 5 10 15
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
20 25 30
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
35 40 45
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
50 55 60
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
65 70 75 80
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
85 90 95
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
100 105 110
Val Cys Val Pro Gly Ser Pro Glu
115 120

<210> 1919
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1919
nnccggccga gctgtgtcca ctgcgtgtc cctgccacct cggccatctg cctctctctt
60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cagcgcatc ncggccacgc
 120
 ccacctccat cctctttgcc ccttactaaa cactgggagc cgcgccgccc gcgacaggcc
 180
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc
 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcgaggacca
 300
 agctcgggg caccgtatca tcccgtagc tctccacct acccctgcca attg
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
		35					40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65				70					75					80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
			85					90				95			
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
			115												

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
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 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccaccctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct cccagatgac
 300
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgngtg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922

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Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1             5             10             15
Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
             20             25             30
Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
             35             40             45
Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
             50             55             60
Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
65             70             75             80
Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
             85             90

```

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923

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nattnaatta tggtagagaaa aggcttatgc gttgcattgc tcgtgcttgc cacactgtca
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120
cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc
180
ccgttgccctt taaacggacg tatcttaaata gacttttatt ggaaggcaca ggccaattc
240
aatggaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
300
cagaaatatg attatttcaa ggtgaagtta ggccagtta agcgaccatt cacgtttgaa
360
aatcccag
368

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<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924

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Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1             5             10             15
Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
             20             25             30
Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
             35             40             45
Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
             50             55             60
Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

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<212> DNA

<213> Homo sapiens

<400> 1927

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 120
 ctttgtaact tccactcccc aaacttctctg aggatctcag aggtggaaat gagaggttcc
 180
 gaggatgagg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
 240
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gaggcgagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa
 360
 atgggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
 420
 acgggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
 480
 acttacgagg aggccaaagc acagcccttc acgcgt
 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5					10					15	
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35				40					45				
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
	50				55					60					
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65				70					75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
			85					90					95		
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
		100					105					110			
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
	115					120					125				
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
	130				135					140					
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145				150					155					160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
			165					170							

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

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nnccgaggac actcagggtc tggggtcctt cttccccaag aggcctgact gcctgggtgt
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tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggccc ctgagtccea caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
360
tcatttttct ttttcttctt ggccccactc tctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccattgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttgggtgt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccgc cagggtccca cctcagggt
600
ccttggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgtgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctcgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtac tcagtcattg tgcccacctc ccaggaccct gagcaggaca
840
caa
843

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<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

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Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1           5           10           15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20           25           30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35           40           45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50           55           60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65           70           75           80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85           90           95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

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100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120

<210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 1931
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 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcggg agggagcact
 120
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttcttac taggacagct tctctccagc ccagtgtggc cacgctgggtg tctcgggtga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcacatcgg
 360
 ttgcagagga aggaaggaa gccacaggct gccttgggga gctttctgaa aggcaggctc
 420
 gatcatgect ctctgggcta cgggtctctc acggtggctc ctggttgga ctgaagtggg
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gggccccag
 540
 cagggtgcc ccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagcgtcgcc ctcttcagg agcctttcat aaccacctct ccttccact ggctaaagat
 660
 gaggttgagc aactgcagga cttgggacct tgttctgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933
 <211> 295
 <212> DNA
 <213> Homo sapiens

<400> 1933
 ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
 60
 atgctgccgg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgcaaca
 120
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg
 180
 ggcccgatg actacctgaa caaacctttc gatgccctg aattacttgc ccgggtgcgc
 240
 gctgtactgc gtccggcgtg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
 295

<210> 1934
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1934
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile
 1 5 10 15
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
 20 25 30
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
 35 40 45
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
 50 55 60
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
 65 70 75 80
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
 85 90 95
 Ser Arg

<210> 1935
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 1935
 accggtgtgg cgggcgcggc cttcaccacc atcggtcca ccgggccgac ggccgggttcg
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 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
 120
 cccatgcct cggcgttcgt gattgccag acccaatcgc tgcggagtt tttcctcagt
 180
 ggctcgatgg ccaaggtgct gaccttgctg tcggtgatc tgatcctgat gctgcgccc
 240

caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298

<210> 1936

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1936

Thr	Gly	Val	Ala	Gly	Ala	Ala	Phe	Thr	Thr	Ile	Gly	Ser	Thr	Gly	Pro
1				5					10					15	
Thr	Ala	Gly	Ser	Gln	Tyr	Ile	Val	Asp	Thr	Phe	Leu	Val	Val	Val	Phe
			20					25					30		
Gly	Gly	Ala	Gln	Ser	Leu	Phe	Gly	Pro	Ile	Ala	Ser	Ala	Phe	Val	Ile
		35					40					45			
Ala	Gln	Thr	Gln	Ser	Leu	Ser	Glu	Phe	Phe	Leu	Ser	Gly	Ser	Met	Ala
	50					55					60				
Lys	Val	Leu	Thr	Leu	Ser	Ser	Val	Ile	Leu	Ile	Leu	Met	Leu	Arg	Pro
65					70				75					80	
Gln	Gly	Leu	Phe	Ser	Ile	Lys	Val	Arg	Lys						
				85					90						

<210> 1937

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1937

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gcctttaatt ctcccaattt atttcaaata catcaaagaa ctcacactgg aaagaggtcc
120
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tgtagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcagggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatccaccca atgtcaggaa tgtgggaaga aatcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtggg gaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtcccttcac gcg
513

<210> 1938

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1938

Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

1	5	10	15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln			
20	25	30	
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg			
35	40	45	
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr			
50	55	60	
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr			
65	70	75	80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro			
85	90	95	
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val			
100	105	110	
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys			
115	120	125	
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His			
130	135	140	
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp			
145	150	155	160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala			
165	170		

<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
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aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctgttggatg tcctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta gggtatatct taagtgtggt gctgctaaca ttgcccaggc
300
agcatctggt tcagctttat ctatattttt tgactgctct gctcctctat gctggacatc
360
aaatttccag ggactatggt cggagtgaac tggggtttgc ctatgaggga ccaatgtatt
420
tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tggtcttttc atggttttct
780

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ggctcgtctt atttgcctt cagatttact cctatttcag tactcgagat cagcctgcat
 840
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 tatcgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac
 1020
 ctaggtttgg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat
 1080
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaagtga ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1				5					10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
			35				40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
	50					55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
	65				70				75					80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85					90					95		
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
		100					105					110			
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
	115					120					125				
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
	130					135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
	145				150					155				160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
			165					170						175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
		180					185					190			
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
	195					200						205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
	210					215					220				
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
	225				230				235					240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

<400> 1943

nagaaacatt caggggtcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga
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 120
 acacagatgt acatggcata gcactgcccc aaagtatcag cccaaggaac cctactttcc
 180
 ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc
 240
 cagggtatatt tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact
 300
 ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
 360
 ctctgcaatc tcacctgcta gagacg
 386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
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Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50					55					60				
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
	65				70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
			85					90						95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105						110	

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

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 gaccgattgg tgtcgaacat ggcacgggtg catgcgacgc gcaccaagat ccagctcaag
 120
 ctgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
 180
 cgactggaaa ttgcggacnn tcgtagacgc caaagcttg aatctgcgcg cgtcaaaacc
 240
 gaatcgctga tcattggacga tatacatttg gagttgcttg aactgcttga gctctactgt
 300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1946

Xaa	Ala	Ser	Arg	Ser	Ala	Leu	Gly	Pro	Arg	Gly	Ser	Lys	Gly	Val	His
1				5					10					15	
Ala	Pro	Leu	Leu	Asp	Arg	Leu	Val	Ser	Asn	Met	Ala	Arg	Trp	His	Ala
			20					25					30		
Thr	Arg	Thr	Lys	Ile	Gln	Leu	Lys	Leu	Ala	Ile	Gln	Arg	Xaa	Gly	Met
		35					40					45			
Leu	Gln	Glu	Lys	Lys	Ala	Ala	Leu	His	Lys	Lys	Val	Arg	Leu	Glu	Ile
	50					55					60				
Ala	Asp	Xaa	Arg	Arg	Arg	Gln	Lys	Leu	Glu	Ser	Ala	Arg	Val	Lys	Thr
65				70						75				80	
Glu	Ser	Leu	Ile	Met	Asp	Asp	Ile	His	Leu	Glu	Leu	Leu	Glu	Leu	Leu
			85					90					95		
Glu	Leu	Tyr	Cys	Glu	Thr	Leu	Tyr	Ala	Arg	Phe	Gly	Leu	Leu	Glu	Gly
			100					105					110		
Arg	Asp	Asn	Glu	Pro	Asp	Asp	Ala	Ile	Arg	Glu	Pro	Met	Ile	Ala	Ile
		115					120					125			
Ile	His	Ala	Ala	His	Arg	Thr	Glu	Val	Lys	Glu	Leu	His	Val	Leu	Gln
	130					135					140				
Asn	Met	Leu													

<210> 1947

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1947

cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgctg taggcgggag
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 120
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctggggc atgaggctct
 180
 gcagcaggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagccccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccattaggaa ctctgcagg gacacgggtg ggttggccga ggccccgtcc aaggtagacc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtcgccag
 420

cccagggccc gagctcgaac agcgtectca tctccaggaa gcaggccccg ag
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5				10						15	
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
			20					25					30		
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
		35					40					45			
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55					60				
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65				70					75				80		
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
			85					90					95		
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100					105					110		
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115					120					125			
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
	130					135					140				
Val	Thr	Ala	Tyr	Thr	Ala										
145						150									

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcgttgag ggaggcgaca tgcttcatga gcgcttgagg ccaactgctca agcgacatct
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gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacgggacg ctcaacaagct tccattggcc attcgcgagg cgtttggtct
180
cgaccgcgcg tacaaccggg tctacatggc cgccatgccca ccgatcgggc aatggcattc
240
cacagtacgc gcagcgcccg tcgtatttgc gccggagccg atcgcgctgt gctttcgctca
300
gccggtcac gctttatgct ccacggcagg tgtggcagca tcttggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc gggtt
395

<210> 1950

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1950

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Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
 20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
 35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
 50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
 65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
 85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
100           105           110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
115           120           125

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<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cggccgcgcg ctctcgcgtc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcggaac cggtctcggtg cctcgggata cctgccgcct ctgctgctgc atgccttgc
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgcctt gcgcgttccg ggccagcgga gccacctcgt attcgtctga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

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<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

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Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
 20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
 35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

50	55	60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly		
65	70	75
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg		80
	85	90
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys		95
100	105	110

<210> 1953
 <211> 329
 <212> DNA
 <213> Homo sapiens

<400> 1953
 acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
 60
 gagcgcagcc agattttccg ggggtccgat gcctacgcgg tgcggacta cgtcaaccag
 120
 catgtgggca gccactgcat tcgectgcct cccaagggcc ggccacgggc gagtatcagc
 180
 catcgcacct ttgccagcct ggacctgtgc cgcatacagct acggcgctcc ggtacgggct
 240
 acatcgggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
 300
 tccagctccc gtggtgagga tgacgtggn
 329

<210> 1954
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1 5 10 15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
20 25 30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
35 40 45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
50 55 60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65 70 75 80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
85 90 95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
100 105

<210> 1955
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg
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tggaatactg ctggggggcg ttcacagaca acatcaaata cgctgtagct gcccaatatt
120
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
180
ccgccaaaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac
240
aatggaaaac atggatactc ccagtccaca acggcacccgt gtccgagttt ttcacccaac
300
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
360
acgtcatgtg cggcaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
			20					25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
		50				55				60					
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65				70					75					80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85					90						95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac
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caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacgggccc ttacttattg
120
gggaggaggc ccgccggggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc
180
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc
240
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt
300

ggggaccctg gggaaggcgc caacttctct cctctgcccc cctcactccc cgcgggcgtc
 360
 cctgggcgcg ctgcccgggc cgcactgggc ggctccatc gtccttccc tctacctgca
 420
 ctgccccagg cgggagagag gccttgcccc nncgaggac cagctgcagc gggcagcggg
 480
 gtctgtctcc cccaaccccc gcccatggc acggggctga accggt
 526

<210> 1958

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1				5					10					15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
	50					55				60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65				70					75					80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
			85					90					95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
		100					105					110			
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
	115					120						125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
	130					135					140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145				150					155					160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
			165					170					175		

<210> 1959

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1959

gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcgggaaggc tcacccgagt
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 cgtcagaagg atcaggggcgc ttgtcgtcgt cagacttcag gacatccac gacatgggta
 120
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagt
 240
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct
 300

cgtctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggaccgta atcgcggtga
 360
 agtcgacgcg caacgcgt
 378

<210> 1960
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
 1 5 10 15
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
 20 25 30
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
 35 40 45
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly
 50 55 60
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
 65 70 75 80
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro
 85 90 95
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala
 100 105 110

<210> 1961
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1961
 ggatccaccc cggaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg
 60
 tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag
 120
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcccc aggaccacgg
 180
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac
 240
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
 300
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag
 360
 acagagcagg cctatgtggc gcgc
 384

<210> 1962
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

1	5	10	15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr			
20	25	30	
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg			
35	40	45	
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn			
50	55	60	
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr			
65	70	75	80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser			
85	90	95	
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys			
100	105	110	
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg			
115	120	125	

<210> 1963

<211> 323

<212> DNA

<213> Homo sapiens

<400> 1963

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nnncccttcc taccctccca tactccccac ccctcttctc cccctgtgc tgagcttgca
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ggcatgaaac accacactgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accacattct gcagctctcc ctcaccctgg
180
cgaccactca ggcattgcat tcgaggggccc ccttcagacc tctcggggtc atcttcccct
240
tccctggcca ttatttttct tcatctgggc tgggcccggg gggcggttcc ccccttctc
300
cttcttttct tttttttctc ttt
323

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<210> 1964

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1964

Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys			
1	5	10	15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val			
20	25	30	
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg			
35	40	45	
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg			
50	55	60	
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro			
65	70	75	80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val			
85	90	95	
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser			

100

105

<210> 1965
<211> 1416
<212> DNA
<213> Homo sapiens

<400> 1965
cggtggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttggtg
60
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct
120
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
180
cgggccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag
240
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc
300
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat
360
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
420
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt
480
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgagagggtg
540
gagcgggatg aggagcggaa gcagcgcaact ctggccgtgg ctgcccgcaa gaagctggag
600
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
660
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag
720
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaata gcgcctcaag
780
ggcctggagg ctgaggtgct gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg
840
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc
900
aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa
960
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc
1020
ctgcaggtag agtcactgac cacagagctg tcagctgagc gcagtttctc agccaaggca
1080
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag
1140
gaggatgctg gggcccgctc ccgccacaag atgaccattg ctgcccttga gtctaagttg
1200
gccaggctg aggagcagct agagcaagag accagagagc gcacccctctc tggaaaagctg
1260
gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg
1320
gtggctgacc agctccggga ccagctggag aagggaaaacc ttcgagtaaa gcagctgaag
1380

cggcagctgg aggaggccga ggaggaggca tcccgg
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
1			5						10					15	
Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
		20						25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
	35					40						45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu
65					70					75					80
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
		85						90						95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
		100						105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
	115					120						125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130					135					140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155					160
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
		165						170						175	
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
		180					185						190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
	195					200						205			
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210					215					220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225				230						235					240
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245					250						255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260						265					270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
	275					280						285			
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290					295					300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305				310						315					320
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
		325						330					335		
Arg	Lys	Leu	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala
		340					345						350		
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

355 360 365
 Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
 370 375 380
 Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
 385 390 395 400
 Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
 405 410 415
 Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
 420 425 430
 Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
 435 440 445
 Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
 450 455 460
 Glu Ala Glu Glu Glu Ala Ser Arg
 465 470

<210> 1967

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1967

aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctggt tcgggcgttg
 60
 ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaaggga
 120
 tgcacacat ctgcggcca gtcagctccc ctgggcttgc actcgtcggg gatgctggcc
 180
 ttgcaccaga tcctctgtgg ggcgtcgggt gtggtcgggc attccagtcg gcagcttggt
 240
 tagtggactg taccgatct catttggtg accggaccgc cttagatagg gcgcttcgca
 300
 gttatcatcg ataccaccgg cattctcttg ggtggcatga acgctcatc tctagatatg
 360
 caaacggccg gggttttcat gcgctcgaga agctgatgct g
 401

<210> 1968

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1968

Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
 1 5 10 15
 Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
 20 25 30
 Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
 35 40 45
 Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
 50 55 60
 Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
 65 70 75 80
 Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

85

90

<210> 1969
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1969
 nncatcgacg cgactggac tcattctgggt gacggccac agatggacac tctgcgcgag
 60
 gaggtcgccg ttcaccgcgt cacggatgct gtcaccctgc tcggtcacgt cgccaacacc
 120
 caggtcatgg cgaccagcg tgatctcaa cgtcagtat tcgtcaacct ctctctctcg
 180
 gaaggacttc ctgtatcaat gatggagggt gcttccctcg gtatcccat tatcgcgact
 240
 ggcgtcgccg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgcccag
 300
 ttcaccgaca cccaggcatc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag
 360
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagttccg cgctctgtc
 420
 gtctacccc aattctgtcg cgagtgtctgg ggcgacgtg atca
 464

<210> 1970
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1970
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp
 1 5 10 15
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr
 20 25 30
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp
 35 40 45
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro
 50 55 60
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr
 65 70 75 80
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu
 85 90 95
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln
 100 105 110
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser
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<210> 1971
 <211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

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Glu	Ile	Ser	Gly	Lys	Met	Asn	Thr	Tyr	Met	Asn	Ser	Thr	Thr	Ser	Lys
			20					25					30		
Lys	Asp	Thr	Gly	Val	Gln	Thr	Asp	Asp	Leu	Asn	Ile	Gly	Ile	Phe	Thr
		35					40					45			
Asn	Ala	Glu	Ser	His	Cys	Gly	Ser	Leu	Met	Glu	Arg	Asp	Ile	Thr	Asn
		50				55				60					
Cys	Ser	Ser	Pro	Glu	Ile	Ser	Ala	Glu	Leu	Ile	Gly	Gln	Phe	Ser	Thr
65					70				75				80		
Lys	Lys	Asn	Lys	Gln	Glu	Leu	Thr	Gln	Asp	Lys	Gly	Ala	Ser	Leu	Glu
			85					90					95		
Lys	Glu	Asn	Asn	Arg	Cys	Asn	Asp	Gln	Cys	Asn	Gln	Phe	Thr	Arg	Ile
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<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

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Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
		20					25					30			
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35				40					45				
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55					60				
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65				70					75				80		
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
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Pro	Pro	Val	Lys	Ser	Cys	Ala									
			100												

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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<210> 1976

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1976
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 35 40 45
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg
 50 55 60
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg
 65 70 75 80
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile
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 Gln Leu His Glu Arg Leu Ala Arg Arg
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<210> 1977
 <211> 551
 <212> DNA
 <213> Homo sapiens

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<210> 1978
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1978

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 35 40 45
 Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50 55 60
 Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
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 Gln Pro Thr Ser Ser
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<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly			
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Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu			
50	55	60	
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu			
65	70	75	80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg			
85	90	95	
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly			
100	105	110	
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser			
115	120	125	
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala			
130	135	140	
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His			
145	150	155	160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu			
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Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val			
180	185	190	
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala			
195	200	205	
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg			
210	215	220	
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln			
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Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His			
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Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu			
305	310	315	320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr			
325	330	335	
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp			
340	345	350	
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp			
355	360	365	
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly			
370	375	380	
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly			
385	390	395	400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly			
405	410	415	
Leu Ser His Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr			
420	425	430	
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser			

435	440	445
Lys Pro Trp Ser Lys Cys Thr Ser Ala Thr Ile Thr Glu Phe Leu Asp		
450	455	460
Asp Gly His Gly Asn Cys Leu Leu Asp Leu Pro Arg Lys Gln Ile Leu		
465	470	475
Gly Pro Glu Glu Leu Pro Gly Gln Thr Tyr Asp Ala Thr Gln Gln Cys		
485	490	495
Asn Leu Thr Phe Gly Pro Glu Tyr Ser Val Cys Pro Gly Met Asp Val		
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Cys Ala Arg Leu Trp Cys Ala Val Val Arg Gln Gly Gln Met Val Cys		
515	520	525
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Gln Cys Ser Arg Ser Cys Gly Gly Gly Val Gln Phe Ala Tyr Arg His		
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Arg Ala Ile Tyr His Ser Cys Ser Leu Met Pro Cys Pro Pro Asn Gly		
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Lys Ser Phe Arg His Glu Gln Cys Glu Ala Lys Asn Gly Tyr Gln Ser		
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Asp Ala Lys Gly Val Lys Thr Phe Val Glu Trp Val Pro Lys Tyr Ala		
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Gly Val Leu Pro Ala Asp Val Cys Lys Leu Thr Cys Arg Ala Lys Gly		
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Thr Gly Tyr Tyr Val Val Phe Ser Pro Lys Val Thr Asp Gly Thr Glu		
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Cys Arg Pro Tyr Ser Asn Ser Val Cys Val Arg Gly Lys Cys Val Arg		
690	695	700
Thr Gly Cys Asp Gly Ile Ile Gly Ser Lys Leu Gln Tyr Asp Lys Cys		
705	710	715
Gly Val Cys Gly Gly Asp Asn Ser Ser Cys Thr Lys Ile Val Gly Thr		
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Phe Asn Lys Lys Ser Lys Gly Tyr Thr Asp Val Val Arg Ile Pro Glu		
740	745	750
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755	760	765
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770	775	780
Ile Asn Gly Lys Tyr Met Ile Ser Thr Ser Glu Thr Ile Ile Asp Ile		
785	790	795
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805	810	815
Leu His Gly Met Gly Tyr Ser Ala Thr Lys Glu Ile Leu Ile Val Gln		
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Ile Leu Ala Thr Asp Pro Thr Lys Pro Leu Asp Val Arg Tyr Ser Phe		
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<210> 1983
<211> 383
<212> DNA
<213> Homo sapiens
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